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ОБЗОРНЫЕ СТАТЬИ/ LITERATURE REVIEW
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БЛИЖАЙШИЕ И ОТДАЛЁННЫЕ ПОСЛЕДСТВИЯ ОРГАНОСОХРАНЯЮЩИХ ВМЕШАТЕЛЬСТВ В РОДАХ У ЖЕНЩИН, ПЕРЕНЕСШИХ ПАТОЛОГИЧЕСКУЮ КРОВОПОТЕРЮ (ОБЗОР ЛИТЕРАТУРЫ)

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IMMEDIATE AND LATE CONSEQUENCES OF ORGAN-PRESERVING INTERVENTIONS DURING CHILDBIRTH IN WOMEN WHO HAVE SUFFERED PATHOLOGICAL BLOOD LOSS (LITERATURE REVIEW)

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Tibbiyot fanlari nomzodi, dotsent
Tibbiyot xodimlarining kasbiy malakasini oshirish markazi
Toshkent, O‘zbekiston

PATOLOGIK QON YO 'QOTISH BILAN OG'RIGAN AYOLLARDA TUG'RUQ PAYTIDA ORRGANLARNI SAQLOVCHI TADBIRLARNING BEVOSITA VA UZOQ MUDDATLI OQIBATLARI (ADABIYOTLAR TAHLILI)

Введение. Акушерские кровотечения продолжают оставаться ведущей причиной материнской заболеваемости и смертности как в большинстве стран мира [10, 13, 22], так и в Узбекистане [2]. 23 февраля 2023 года опубликован доклад Организации Объединенных Наций «Тенденции материнской смертности», в котором проводится анализ материнской смертности на национальном, региональном и глобальном уровнях за период с 2000 по 2020 г. В докладе отмечаются значительные успехи в сокращении материнской смертности с 2000 по 2015 г., однако в дальнейшем положительная динамика замедлилась, а в некоторых случаях наметилось ухудшение ситуации. Как отмечено в докладе, ведущими причинами материнской смертности являются в первую очередь тяжелые кровотечения и высокое артериальное давление, инфекции, связанные с беременностью, осложнения в результате небезопасного проведения аборта, а также фоновые заболевания (например, ВИЧ/СПИД и малярия), течение которых может усугубляться беременностью [33].

Согласно данным Отчетов (с 2013 по 2020 гг.) по конфиденциальному исследованию случаев материнской смертности в Узбекистане лидируют акушерские кровотечения (АК), частота которых в стране колеблется в пределах от 22,2% до 29,2%. Так если по данным отчета интенсивный показатель материнской смертности в 2013–2015 гг. от акушерских кровотечений составил 4,5 на 100.000 родов, то за 2018–2020 гг. наблюдается тенденция к росту до 5,4 [2].

Вероятность АК значимо увеличивается с оперативным родоразрешением, когда риск материнских осложнений высок и при последующих беременностях вероятность серьезных последствий повышается. Согласно данным литературы, материнская смертность при абдоминальном родоразрешении в 5 раз выше, нежели при родоразрешении через естественные родовые пути. Так согласно данным конфиденциального отчета методом родоразрешения женщин, умерших от АК, в 81,8% (63 женщины) было кесарево сечение и только в 18,2% (14 женщин) через естественные родовые пути, при этом частота экстренного и планового кесарева сечения составила 76,2 % против 23,8 % [2]. В этой связи вызывает беспокойство общемировая тенденция увеличения частоты родоразрешений путем операций кесарева сечения.

Подразделяя методы остановки акушерских кровотечений на консервативные и оперативные (хирургический гемостаз), арсенал их остается неизменным в последние года. Если до 2000 годов

чаще всего при неуспешной медикаментозной остановки кровотечения использовалась радикальная гистерэктомия с придатками или без, то на сегодняшний день является самым последним этапом хирургического гемостаза [13, 22, 23, 36]. В литературе описаны различные методы консервативной остановки персистирующего АК, являющимися органосохраняющими: лигирование 3-х пар магистральных сосудов, эмболизация маточных артерий (ЭМА), различные виды компрессионных швов (КШ), перевязка внутренних подвздошных артерий (ВПА) [3, 5, 9, 10]. Если же в 2005 году в мире уже было описано более 1000 процедур с деваскуляризацией (ДВ) или наложением КШ, то на сегодняшний день сложно подсчитать количество данных операций [9, 22, 23]. Эффективность консервативных хирургических методов составляет по некоторым данным от 70% до 94% [3, 5, 8, 22, 36]. Однако данные процедуры могут иметь в дальнейшем не только кратковременные, но и отдаленные последствия, вследствие чего нами предпринята попытка поиска данной информации в доступной литературе.

Ближайших осложнений после органосохраняющих операций. На первом этапе поиск коснулся ближайших осложнений после органосохраняющих операций. В литературе описываются случаи некроза миометрия после наложения КШ, наличие синехий в полости матки и другие осложнения [8, 21, 31]. В литературе описан случай повреждения внутренней подвздошной вены во время перевязки ВПА при тяжелом ПРК из-за разрыва матки [16]. Самым грозным и серьезным осложнением при наложении КШ является тотальный некроз матки. В литературе был описан случай 35-летней беременной, которой произведено кесарево сечение при поперечном положении и выпадении ручки. Операция осложнилась ПРК, после которой была сделана перевязка маточной артерии с наложением КШ по Б-Линч. В послеродовом периоде на 10 сутки у нее была диагностирована субинволюция матки со множеством абсцессов в стенке матки, вследствие чего была произведена субтотальная гистерэктомия, патоморфологический анализ показал некроз матки [21].

Одним из наиболее отдаленных осложнений после органосохраняющих операций возможно развитие внутриматочных проблем (синехии). Наиболее часто встречаются описание не излечимых или трудноизлечимых случаев синдрома Ашермана. Согласно данным авторов, риск развития синехий после КШ на матке составляет от 5% до 10%. Для выяснения частоты данного осложнения Г. Ратх с соавт провели оценку полости матки с помощью гистероскопии у 37 женщин, которым при ПРК были наложены КШ на матку. Результаты показали развитие синехий у семи пациентов, из них у трех женщин была выраженная форма синдрома Ашермана, которые не могли быть устранены [23].

Схожие исследования провели канадские врачи, которые описали случай развития тяжелой формы синдрома Ашермана после наложения КШ по Б-Линч и перевязки маточной артерии, что привело к развитию вторичного бесплодия маточного происхождения с полной облитерацией полости матки. Авторы в выводах комментируют, что КШ по Б-Линч являются высоко успешной консервативной хирургической методикой, используемой в лечении АК, однако сохраняется вероятность осложнений в последующем в плане будущей фертильности [18].

Julie Blanc с коллегами проводили изучение 23 случаев после перевязки 3-х пар МА с или без гемостатических множественных КШ для управления ПРК. Всем 23 женщинам с целью изучения полости матки проводилась диагностическая гистероскопия, у 5 из них выявились аномальные результаты (22%), которые были связаны с эндометритом, что в дальнейшем могло привести к внутриматочным синехиям [7].

Отдаленных последствия после органосохраняющих операций. Попытки поиска в литературе информации по изучению отдаленных последствий состояния репродуктивной функции у женщин привели к тому, что информации по восстановлению менструации, нарушению фертильности в этом направлении недостаточно. Попытки выяснения фертильности после КШ в основном упирается в описание клинических случаев либо единичных, либо серии случаев [4, 5, 6, 26].

Описание случаев или серии случаев в литературе достаточно, однако отсутствует более полноценный объём информации о репродуктивном потенциале женщины. Исследователи предпринимают попытки проведения обзора литературы, однако в полном объёме предоставить информацию о фертильности женщин не предоставляется возможным, а также иногда имеющийся материал является противоречивым. Большинство исследований, целью которых является изучение восстановления менструального цикла и фертильности, освящают информацию о беременностях, родах у данной категории женщин, однако отслеживание менструального цикла встречается редко.

Так, Сентильес Г. с соавторами был проведен поиск в литературе за 11-летний период в 1997-2008 годах, который выявил 13 беременностей после КШ по Б-Линч, одна из которых в связи с ПРК на фоне преэклампсии завершилась гистерэктомией. В заключение авторы рекомендуют воздержаться и не применять КШ в первой линии хирургического гемостаза. При этом авторы считают, что перевязка МА не ставит под угрозу репродуктивную функцию и предлагают в качестве первой щадящей линии остановки ПРК [32].

Полученные результаты С. Гиззо с соавторами при изучении обзора литературы за 15 лет ограничены краткосрочным наблюдением и малым количеством исследований, особенно после лигирования маточных сосудов. К сожалению, данные по восстановлению менструального цикла и частоты беременности после этих процедур в данном исследовании крайне ограничены [17].

В 2014 году в BJOG, опубликован систематический обзор, целью которого явилось изучение менструальных и фертильных исходов после хирургического лечения ПРК в 28 исследованиях [12]. Из которых в 17 исследованиях (675 женщин) имелись сообщения о результатах фертильности после ЭМА, пять исследований (195 женщин) - после деваскуляризации матки, и шесть исследований (125 женщин) - после наложения КШ на матку. В целом, как представлено в обзоре у 553 из 606 (91,25%) женщин менструация возобновилась в течение 6 месяцев после родов. В заключении авторы считают, что щадящие матку хирургические методы лечения тяжелого ПРК, по-видимому, не оказывают отрицательного влияния на результаты менструального цикла и фертильности у большинства женщин; однако количество исследований и качество имеющихся доказательств недостаточно.

Nizard J. с коллегами сообщили о 21 беременности из 69 женщин с перевязкой маточных сосудов (МС), что составило 30,4% [26]. Никакой дополнительной информации о фертильности оставшихся 48 пациентов не было. Авторы сделали вывод о менее чем 30% фертильности после органосохраняющих операций. При этом авторы другого исследования считают, что отсутствие реваскуляризации матки может быть негативным фактором для будущей репродукции [11].

В период с 2011 по 2020 года при анализе литературы исследователи описывают серию случаев у 12 женщин, перенесших перевязку маточных артерий во время кесарева сечения и в последующем родивших в промежутке от 2 до 7 лет. Авторы считают, что отсутствие побочных эффектов от перевязки МС связано с развитием коллатерального кровообращения и обеспечения адекватного притока крови к матке. Кроме того, в период инволюции матки возможна реканализация артерий. Авторы исследования считают, что после перевязки маточных артерий частота реканализации через 12-месяцев наблюдения составила 32,5% и 37,5% для левой и правой МА соответственно [20]. Авторы другого исследования считают, что двусторонняя перевязка МА не оказывает отрицательного влияния на овариальный резерв или кровоснабжение яичников, поэтому этот метод лечения следует использовать в качестве метода сохранения фертильности, чтобы избежать гистерэктомии у пациенток с послеродовыми кровотечениями [35].

Изучение отдаленных последствий КШ также явилось предметом изучения для многих исследователей.

Органосохраняющие операции для первородящих могут вызвать беспокойство в плане будущих беременностей и привести либо к бесплодию, либо к нарушению репродуктивной функции считают авторы следующего исследования. Так в госпитале университета 3 уровня (4,800 родов в год) в период 2002-2012гг были идентифицированы 43 из 44 эффективных процедур наложения КШ по Б-Линч, наблюдение в среднем проводилось 45 мес (от 17 до 126 мес). В целом забеременели 38% женщин, при этом из 43 первородящими были 26 женщин, у которых в 44% развилась беременность. У одной женщины развился синдром Ашермана, три женщины пытались забеременеть. Авторы считают, что репродуктивные прогнозы после КШ указывали на хорошие показатели восстановления фертильности, но могут возникнуть осложнения, которые могут повлиять на будущую беременность [15].

С другой стороны, следующее исследование в оценке фертильности при наложении КШ по B-Lynch показало не лучшие результаты с точки зрения бесплодия. В исследовании было сообщение только о семи беременностях из 28 пациентов, что составило 25% успеха. У остальных женщин (21 женщина) после наложения швов на матку не было зарегистрировано ни одной беременности.

8-летний обзор по рождаемости и исходу беременности после деваскуляризации матки при тяжелом ПРК, проведенный Л.Сентильес с коллегой, посредством интервьюирования показал следующее. В исследование были включены 32 пациентки с персистирующим ПРК из 40 (80%), которые были разделены по группам (А - пациентки с перевязкой маточных артерий, В - перевязка маточной и яичниковой артерии, С - перевязка подвешивающей связки яичника). Все пациенты из группы А и В, кроме 4, имели регулярный менструальный цикл, у 13 пациентов было 16 беременностей. У пациенток из группы С в двух случаях наблюдалась послеродовая аменорея вследствие яичниковой недостаточности и внутриматочных синехий, частота осложнений составила 33,3% в этой группе. Другие авторы, как и Л.Сентильес с соавт, изучающие данное исследование предложили проводить двустороннюю перевязку маточно-яичниковой артерии, а не перевязку подвешивающей связки яичника. Также было высказано предположение, что окклюзия сосудов после ступенчатой деваскуляризации матки носит временный характер, поскольку ожидается реканализация с последующей нормализацией кровообращения матки и для предотвращения осложнений достаточно временного коллатерального кровообращения [3].

В исследовании Салах М. Рашид с соавт. [30] оценивали репродуктивные показатели после консервативного лечения ПРК у 168 пациенток, набранных в амбулаторных клиниках, которым ранее были проведены органосохраняющие операции: группа I - перевязка ВПА (n = 59); группа II - поэтапная деваскуляризация (ДВ) (n = 65); III группа - перевязка маточных артерий с 2-х сторон (n = 2); и группа IV - сочетание перевязки МС и КШ по B-Lynch (n = 42). При сравнительном анализе распространенности бесплодия, состояния овариального резерва, а также распространенности акушерских осложнений у матери и/или плода между группами были получены следующие результаты: в группе II и IV имели самую высокую распространенность бесплодия, частота акушерских осложнений, особенно предлежания плаценты и преждевременных родов, была высокой в IV группе. В заключении, авторы считают, что из 4 гемостатических процедур перевязка ВПА оказала наименьшее вредное влияние на репродуктивную функцию, не оказывая отрицательного влияния на последующую фертильность или исходы беременности. Поэтапная ДВ увеличивала риск преждевременной недостаточности яичников, а B-Lynch повысил риск эндометриоза, внутриматочных спаек, предлежания плаценты и преждевременных родов [30]

Большинство исследований в литературе по изучению репродуктивной функции наиболее часто встречаются после перевязки ВПА [27, 34]. Авторы следующего исследования, считают, что перевязка ВПА приводит к снижению кровотока в малом тазу при сохранении репродуктивной функции. При этом размер выборки очень маленький, описывается пять беременностей из 34 гинекологических и 13 акушерских кровотечений с перевязкой ВПА [23]. В другой статье представлены предварительные данные продолжающегося исследования по проверке гипотезы о том, что плохая перфузия матки является причиной неудачной имплантации эмбрионов. Из этого авторы считают, что плохая перфузия матки является причиной бесплодия [19]. Исследование по изучению АМГ после перевязки ВПА показывает, что в краткосрочной перспективе данная процедура приводит к изменению овариального резерва [25], аналогичное исследование подтверждает ухудшение овариального резерва, изменяя кровоснабжение яичников [29].

В литературе уделяется внимание и еще одной из методик управления ПРК — это использование внутриматочной баллонной тампонады (БТ), которая имеет тенденцию к увеличению в применении [14]. Однако, также недостаточно изучены менструальная функция и репродуктивные исходы после такого лечения. В заключении авторы считают, что БТ при консервативной остановки тяжелого ПРК оказывает небольшое влияние в последующим на менструальную и репродуктивную функцию и для управления ПРК считается оптимальным методом.

Эмболизация маточной артерии (ЭМА) также явилась объектом для изучения. Согласно некоторым данным, ЭМА была ассоциирована с преждевременными родами, СОРП, приращением плаценты (ПП) при последующих беременностях [28]. В виду наличия разрозненных данных последствий после ЭМА S. Matsuzaki с коллегами провели ретроспективный 6-летний анализ изучения случай-контроля беременностей после ЭМА (с января 2012 г до октября 2017г.), где сравнили 2 группы – после ЭМА и без ЭМА. Были использовали данные 3155 пациентов в этом исследовании, из которых 16 пациентов подверглись ЭМА. Авторы не увидели разницы в частоте преждевременных родов (12,5% против 14,2 %, соответственно, ОР 0,863; Р=0,84), данные по СОРП были недостаточны. Однако, в группе после ЭМА (37,5%) случаи с ПП были диагностированы в 3 раза чаще, чем в группе без ЭМА (12%). Авторы делают вывод, что наличие ЭМА в анамнезе является значительным фактором риска ПП [24].

Следующее ретроспективное когортное исследование женщин после ЭМА проведено Корейской национальной службой, в котором провели изучение за 14-летний интервал за последующей беременностью и новорожденными. Женщины в группе ЭМА имели значительно более высокий риск приращения (OR= 38,91) и предлежания плаценты (OR = 6,98), преждевременных родов (OR=2,23) во время вторых родов. Новорожденные имели более высокую вероятность серьезных врожденных пороков развития (OR=1,62) и неблагоприятных неонатальных исходов (OR = 1,83). Долгосрочные результаты показали более высокий риск синдрома дефицита внимания и гиперактивности. Авторы пришли к выводу, что женщинам с историей ЭМА требуется тщательный дородовой уход и пристальное наблюдение во время последующих родов из-за повышенного риска осложнений [37].

Отдельно стоит выделить психоэмоциональные изменения у женщин, которые развились после хирургического гемостаза. Так при проведении опроса 563 женщин, 234 (41,6%) женщины ответили утвердительно на вопрос «Изменилось ли качество Вашей жизни после наложения компрессионных гемостатических швов». Практически каждая 2-3 женщина отметили, что изменения наблюдались в виде нарушений менструального цикла (15,4%), психоэмоциональных расстройств (16,3%), вторичного бесплодия (15,7%). У 58,4% женщин качество жизни существенно не изменилось [1].

Заключение. В остановке акушерских кровотечений при неэффективности консервативных методов переходят к хирургическому гемостазу, эффективность которого достигает до 94%. В нашей стране наиболее часто применяют три метода органосохраняющих операций — это перевязка 3-х пар МС, наложение КШ или их комбинация, в некоторых родовспомогательных учреждениях расширены показания для профилактической перевязки маточных сосудов. Однако остаются неизученными как ближайшие, так и отдаленные последствия

после органосохраняющих операций. Из краткосрочных последствий наиболее часто в описании встречаются синехии в полости матки вплоть до полной облитерации, иногда встречаются случай некроза матки. В полном объёме отдаленные последствия в литературе не встречаются, наиболее часто описываются случаи беременности и родов. В зависимости от метода остановки кровотечения беременность развивается от 25% до 77,8%, при этом важным моментом является возможность беременности у первородящих, которая составляет 44% по некоторым данным. Течение беременности протекало чаще без осложнений, однако встречались случаи приращения/предлежания плаценты и преждевременных родов, ПРК. При этом в доступной нам литературе наиболее часто встречались заключения исследователей, где деваскуляризация маточных сосудов чаще увеличивала риск преждевременной недостаточности яичников, снижение овариального резерва, что приводило к развитию бесплодия, а КШ по B-Lynch повышали риск эндометриоза и внутриматочных спаек.

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VITAMIN D VA SUYAK TO'QIMASI MINERAL ZICHLIGINING KLIMATERIK SINDROMI RIVOJLANISHIDAGI O'RNI (ADABIYOTLAR SHARXI)

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THE ROLE OF VITAMIN D AND BONE MINERAL DENSITY IN THE DEVELOPMENT OF CLIMATERIC SYNDROME (LITERATURE REVIEW)

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РОЛЬ ВИТАМИНА Д И МИНЕРАЛЬНОЙ ПЛОТНОСТИ КОСТНОЙ ТКАНИ В РАЗВИТИИ КЛИМАТЕРИЧЕСКОГО СИНДРОМА (ОБЗОР ЛИТЕРАТУРЫ)

Dolzarbligi. Tibbiyotda eng ko'p o'rganilgan tadqiqot yo'nalishlaridan biri bu menopauzaning asosida yotuvchi fiziologik jarayonlar hisoblanadi. Klimakteriy - bu ayollar hayotidagi tabiiy fiziologik bosqich bo'lib, bu davrda tanadagi umumiy yoshga bog'liq o'zgarishlar bilan bir qatorda reproduktiv tizimda involyusion jarayonlar sodir bo'ladi. Bu davr reproduktiv funksiyaning bosqichma-bosqich so'nishi, keyinchalik esa menstrual faoliyatning to'xtatishi bilan tavsiflanadi. Premenopauzal davrdagi ayollarning salomatlik holati bundan oldingi davrga nisbatan va zamonaviy turmush sharoitlari bilan bog'liq ravishda sezilarli darajada o'zgaradi. Ko'pgina tadqiqotlar shuni tasdiqlaydiki, D vitamini keng ko'lamli ta'sirga ega bo'lgan ko'p qirrali bioregulyatordir. Bu esa D vitamini yetishmovchiligini o'z vaqtida tuzatish muhimligini ko'rsatadi va undan foydalanishning keng imkoniyatlarini ochib beradi. So'nggi yillarda menopauzaning patologik kechish holatlari ko'p uchramoqda va umumiy populyatsiyadagi ayollarning taxminan yarmini o'z ichiga olmoqda. Estrogen yetishmovchiligi sababli namoyon bo'ladigan klimakterik sindromda ifodalangan patologik menopauza ayollarning 65-70% neyrovegetativ tizim, endokrin-metabolik faollik va psixo-emotsional holatning buzilishi bilan kechadi. Tananing qarishi va jinsiy gormonlar ishlab chiqarilishining pasayishi sharoitida, postmenopauzal davrdagi ayollar uchun D vitamini deb nomlanuvchi boshqa muhim gormonning yetishmasligi muhim ahamiyatga ega bo'ladi. Kalsiy va fosfor gomeostazini va suyaklar salomatligini ushlab turishdagi roli bilan ma'lum bo'lgan D vitamini shuningdek, organizmning umumiy salomatligini saqlashda ham muhim ahamiyatga ega bo'lmoqda.

Butun dunyo bo‘ylab, postmenopauzal yoshdagi ayollarda menopauzaning klinik va biokimyoviy parallellarini baholashda yuqori samaradorlikka erishishga qaratilgan bir qator tadqiqotlar amalga oshirilmoqda. Postmenopauzal davrdagi ayollarning organizmida jinsiy gormonlar darajasi pasaygan vaqtda ko‘plab patologik jarayonlar va kasalliklarning rivojlanishi D vitamini yetishmovchiligi bilan bog‘liq bo‘lishi mumkin. Bu yetishmovchilik natijasida osteoporoz, yurak-qon tomir kasalliklari, metabolik sindrom, semizlik, insulinorezistentlik va boshqa kasalliklar rivojlanishi mumkin, ammo bu holatlarning oldini olish ham mumkin edi. Shu sababli, ayol tanasining moslashuvchanligi va chidamliligi ma’lum darajada menopauza va klimakterik sindromning rivojlanishiga ta’sir qilishini aniqlash maqsadida, ko‘p hollarda menopauza davrining o‘ziga xos xususiyatlarini o‘rganish ilmiy tadqiqotlar uchun ustuvor vazifa bo‘lib qolmoqda. O‘z navbatida, moslashuvchanlikni shakllantirishning o‘ziga xos xususiyatlari reproduktiv tizimning ishlashiga bog‘liq bo‘lganligi sababli, muolajalarni tayinlash ushbu soha mutaxassislari uchun dolzarb muammo hisoblanadi. Postmenopauzal davrdagi ayollar duch keladigan muhim muammolarni hisobga olgan holda, menopauzal patologiyalar rivojlanishini bashorat qilish uchun yondashuvlar ishlab chiqish ayniqsa muhimdir. Bunday yondashuvlar, shuningdek, klimakterik sindromni kompleks davolash usullarining tarkibiy qismlaridan biri bo‘lgan D vitamini yetishmovchiligini o‘z vaqtida aniqlash va tuzatishni o‘z ichiga oladi. Ushbu sa’y-harakatlar ayollar salomatligini va umumiy hayot sifatining turli ko‘rsatkichlarini yaxshilash va saqlashga qaratilgan. [1, 4, 2, 11].

So‘nggi yillarda adabiyotlarda nashr etilgan ma’lumotlarni o‘rganish shuni ko‘rsatdiki, ayollarda premenopauzaning maqbul kechishiga salbiy ta’sir ko‘rsatadigan patologiyalarni aniqlash va davolash vazifalari shifokorlardan tashqari, davlat sog‘liqni saqlash organlari tomonidan ham muhokama qilinadigan masaladir.

Klimakterik sindromni maqbul davolash usulini aniqlash bugungi kunda tibbiy va ijtimoiy jihatdan muhim ahamiyatga ega, shuni ta’kidlash lozimki, asosiy e’tibor gormonal terapiyaning turli jihatlarini o‘rganishga qaratilgan: samaradorligini va xavfsizligini aniqlash, yurak-qon tomir tizimiga ta’siri, suyak tizimining metabolizmi, psixo-emotsional ta’siri, shuningdek metabolik sindrom va yondosh ta’sirlarini [3, 4, 7, 11].

Hayotning turli davrlaridagi D vitaminining ta’siriga va uning xususiyatlariga qiziqish bildirilganligi sababli, ko‘plab tadqiqotchilar ushbu vitaminning inson salomatligini saqlash uchun ajralmas ekanligini ta’kidlamoqdalar [30]. D vitamini konsentratsiyasining pasayishi organizmdagi o‘tkir va surunkali patologiyalar bilan bevosita bog‘liqdir, ular orasida kalsiy almashinuvining buzilishi, suyak tuzilmalari yaxlitligining buzilishi, insulinga past sezuvchanlik, 2-tipdagi qandli diabet, yurak-qon tomir kasalliklari, metabolik sindrom, Alsgeymer kasalligi, shuningdek, depressiya kabilar odatda postmenopauzal davrda rivojlana boshlaydi [15, 29, 23, 13]. Eng muhim omillardan biri shundaki, D vitaminining yetishmasligi yashirin tarzda kechishi mumkin yoki mushaklardagi yengil og‘riqlar, ularning zaifligi, shuningdek jismoniy ko‘rsatkichlarning pasayishi va boshqa o‘ziga xos bo‘lmagan simptomlar shaklida namoyon bo‘lishi mumkin, bu esa o‘z navbatida to‘g‘ri tashxis qo‘yishda bir qator qiyinchiliklarga olib keladi [21, 24].

Ayollarda suyaklarning mineral tarkibiy qismiga qaratilgan estrogenlarning himoya funksiyasi uzoq yillar oldin isbotlangan. Postmenopauzaning asosiy qiyinchiliklaridan biri bu osteopeniya, osteoporozning rivojlanishi, shuningdek, yiqilish va sinish xavfining yuqoriligidadir [23]. D vitaminining asosiy xususiyatlaridan biri skelet mushaklarini turli xil o‘zgarishlardan himoya qilish va klimakterik yoshdagi ayollarning yiqilishini oldini olishdir. D vitamini yetishmasligi tufayli yuzaga keladigan o‘zgarishlar ko‘pincha proksimal qismlarning mushaklariga, ko‘pincha oyoq mushaklariga ta’sir qiladi [12]. Meta-tahlil natijalariga ko‘ra, xolekalsiferolni kuniga 482 dan 770 XB/sut gacha bo‘lgan dozada qabul qilish umurtqaning jarohatlanish ehtimolini 20% ga, son suyagining jarohatlanishini 18% ga kamaytiradi [30]. D vitaminining optimal darajada bo‘lishi nerv-mushak tizimining tiklanishi tufayli mushaklardagi optimal muvozanatni ta’minlaydi. Bir qator mualliflar, D vitaminining yetishmovchiligini dori-darmonlar ko‘rinishida to‘ldirish klimakterik sindromning yengilroq kechishiga olib kelishini ta’kidlashmoqda [11].

Klimakterik sindromi bo‘lgan ayollarda D vitamini yetishmovchiligining barcha jihatlari hali ham to‘liq o‘rganilmagan, ammo bugungi kunda D vitamini miqdorini erta korreksiyalash postmenopauzal davrning erta bosqichlarida hayot sifatining ko‘plab parametrlarini sezilarli darajada optimallashtirishini va xususan, suyaklar mineral zichligining tiklanishini ta’minlashi isbotlangan.

Ayollar butun hayoti davomida ko‘plab gormonal o‘zgarishlarga duch kelishadi. Bular kunlik tebranishlar va oylik sikllardan tortib, balog‘atga yetish, homiladorlik, tug‘ish va menopauza kabi hayotning muhim o‘tish davrlarini o‘z ichiga oladi [26, 30, 27]. Ayollar organizmidagi bu o‘zgarishlarni o‘rganish bo‘yicha ilmiy tadqiqotlarning uzoq tarixi mavjud. Gippokrat ayolning bachadoni uning tanasi atrofida harakatlanishini ilgari surgan va u «hysteria» deb nomlagan (yunoncha «bachadon» degan ma’noni anglatadi). Bugungi kunda zamonaviy tibbiyot ayolning tanasida sodir bo‘ladigan o‘zgarishlar haqida birmuncha ko‘proq ma’lumotlarga ega. Biroq, bu o‘zgarishlar adaptatsiya va moslashishni o‘z ichiga olgan yangi talablar bilan birga keladi [13] va bu o‘tish davrlari bilan bog‘liq psixologik jarayonlarni haqidagi tushunchalar hali ham nisbatan cheklangan [16, 26].

Balog‘at yoshi va homiladorlik odatda ijobiy o‘zgarishlar va natijalar bilan bog‘liq bo‘lgan o‘tish davrlaridir [30, 15, 22]. Bundan farqli o‘laroq, menopauza salbiy o‘zgarishlarga olib keladi, chunki ayollar bu davrda stereotipik tarzda tushkunlik holatiga tushadi, kasal bo‘ladi va jinsiy jihatdan noqulayliklar yuzaga keladi [21, 26]. Menopauza ayolning fertil davridan nofertil davrga o‘tishini ifodalaydi va yosh jihatdan uning kattaroq yoshga o‘tishi sifatida qabul qilish mumkin. Boshqa gormonlar bilan bog‘liq hayotning o‘tish davrlari kabi [12, 25, 12], tanadagi bu o‘zgarishlar ayolning o‘zi va tanasi haqidagi fikrlari va his qilishiga ta’sir qilishi hamda salomatlikga, ijtimoiy xatti-harakatlariga, shuningdek, hayot sifatiga ham ta’sir ko‘rsatishi mumkin [21, 22, 30].

Menopauza - bu tuxumdonlarning follikulyar faolligini yuqotishi natijasida yuzaga keladigan hayz ko‘rishning doimiy to‘xtashi va boshqa aniq sabab bo‘lmagan holatda 12 oy muntazam davom etgan amenoreyadan so‘ng tan olinadi [21].

Menopauza odatda 45 dan 55 yoshgacha bo‘lgan ayollarda tabiiy ravishda sodir bo‘ladi (Milliy Sog‘liqni saqlash institutlari (MSSI) Fanlar kengashi, 2005) yoki medikamentoz davolash usullari (masalan, kimyoterapiyasi) yoki jarrohlik aralashuvlari (masalan, ikki tomonlama salpingoofarektomiya (SOE) ikkala tuxumdonlarni olib tashlanishi bilan) natijasida yuzaga kelishi mumkin. Ushbu dissertatsiyada taqdim etilgan tadqiqotlar nafaqat menopauzaning qisqa tibbiy bosqichiga, balki uning atrofidagi kengroq murakkab o‘zgarishlarga ham qaratilgan, va bu ushbu dissertatsiyada menopauzal o‘tish davri deb ataladi.

Menopauzal o‘tish davri perimenopauzadan postmenopauzaga o‘tishni va unga hamroh bo‘ladigan simptomlarni qamrab oladi. Bu holat shuningdek klimakterik davr ham deyiladi, Xalqaro menopauza jamiyati tomonidan bu davr ayollarda qarish davri ya’ni reproduktiv fazadan reproduktiv bo‘lmagan fazaga o‘tish davri deb belgilangan. Bu turli xil simptomlar bilan kechishi mumkin bo‘lgan perimenopauza davrini va undan keyingi o‘zgaruvchan davrni o‘z ichiga oladi. Perimenopauza yaqinlashayotgan menopauza bilan bog‘liq endokrinologik, biologik va klinik o‘zgarishlar bilan boshlanadi va oxirgi hayzdan keyin 12 oygacha davom etishi mumkin (JSST tadqiqotchilar guruhi, 2016).

Ushbu bosqichdan oldingi reproduktiv davr premenopauza deb ataladi, u perimenopauzal fazaning boshlanishiga qadar davom etadi. Perimenopauza va menopauzadan keyingina ayol postmenopauzal davrga o‘tgan deb hisoblanadi, ammo u hali ham menopauza bilan bog‘liq alomatlarni boshdan kechirishi mumkinligi sababli, bu alomatlar to‘xtamaguncha, u hali ham menopauzal o‘tish davrida deb hisoblanadi [8, 11, 16].

Menopauzal o‘tish davri bilan bog‘liq alomatlar ham jismoniy, ham psixologik bo‘lishi mumkin, jumladan vazomotor simptomlar, somatik alomatlar, hayz siklining o‘zgarishi, uyqu buzilishi, tushkun kayfiyat, tashvish, xotira, e’tiborni jamlash bilan bog‘liq muammolar va jinsiy xatti-harakatlardagi o‘zgarishlar [22, 23]. Vazomotor simptomlar (isib

ketish va tungi terlash) menopauzal o‘tish davri bilan bog‘liq bo‘lgan eng keng tarqalgan va ko‘p uchraydigan alomatlardir.

Bunday alomatlardan Evropa va Shimoliy Amerikadagi menopauzal o‘tish davrini boshdan kechirayotgan ayollarning taxminan 70% shikoyat qiladi, ulardan 15-20% bu holatni muammoli deb bilishadi [23]. Menopauzal o‘tish davri bilan bog‘liq boshqa o‘zgarishlarga teridagi, sochlardagi [22, 24], tana vazni va tana tuzilishi bilan bog‘liq o‘zgarishlar kiradi [13, 15].

Menopauzal o‘tish davridagi gormonal o‘zgarishlar ayollarda depressiya [3, 11, 13], yurak-qon tomir kasalliklari [11, 15] va osteoporoz [5, 27, 26] kabi uzoq davom etuvchi kasalliklar xavfini oshiradi.

Shuning uchun bu hayotiy o‘tish davri bilan bog‘liq turli xil alomatlarga duch kelishi mumkin bo‘lgan; bu o‘zgarishlar va alomatlarga bardosh bera oladigan va bera olmaydigan ayollarni aniqlash; hamda bu o‘tish davrida ayollarning sog‘lig‘ini saqlash, shuningdek kelajakdagi kasalliklar xavfini kamaytirish usullarini aniqlash lozim. Ushbu o‘tish davrini yaxshiroq tushunish uchun biz birinchi navbatda menopauza bilan bog‘liq bilimlar va sog‘liqni saqlash tizimining rivojlanishiga olib keladigan nazariyalar va tadqiqotlar tarixiga qarashimiz kerak [7, 14, 13].

Ayollar hayoti davrlarining reproduktiv tasnifi 2001 yilda bir guruh olimlar tomonidan reproduktiv tizimning qarishini o‘rganish jarayonida yaratilgan (Stages of Reproductive Aging Workshop - STRAW). Ayollarning reproduktiv tizimining funksional holatining bosqichlari markerlari aniqlandi va 3 ta davrga bo‘lindi: reproduktiv, o‘tish davri (menopauzaga o‘tish yoki menopauzal o‘tish) va postmenopauza; ular 7 bosqichdan iborat bo‘lib, boshlang‘ich nuqtasi shartli ravishda 0 – menopauza bosqichi belgilangan. Fertil yosh «minus» belgisiga ega va erta (-5), avj olish (-4) va kechki (-3) davrlarga ajratilgan, o‘tish davri erta (-2) va kechki (-1) bosqichga ega. Postmenopauza ham erta (+1) va kechki (+2) bosqichga bo‘lingan.

2011 yilda STRAW +10 bosqichlararo o‘tish markerlarini eng so‘nggi ilmiy ma’lumotlar bilan to‘ldirdi, kechki reproduktiv, erta va kechki o‘tish davrlarida hayz sikli ko‘rsatkichlari ayniqsa aniq qayd etilgan va ba’zi miqdoriy ko‘rsatkichlar o‘zgartirilgan [137]. STRAW +10 markerlari ko‘pchilik ayollar uchun yashash joyidan va turmush tarzidan qat’iy nazar to‘g‘ri keladi [27].

Klimaks – ayollarning hayotidagi mutlaqo fiziologik hodisadir, ammo ayollarning 80% bu davrda turli asoratlarni boshdan kechiradi [13] va ayollarning taxminan 50% estrogen sekretsiyasining kamayishi turli xil buzilishlarga olib keladi [25], ayniqsa shaharda istiqomat qiluvchi ayollarga [10].

Erta klimaksning asosiy belgilari: «...isib ketish, terlash, uyqusizlik, holsizlik, xotiraning pasayishi, kayfiyatning beqarorligi, tana massasining ortishi va boshqalar». Klimaksdagi ayollarning 50-85% da kuzatiladigan "isib ketish" eng ko‘p uchraydigan belgidi.

Isib ketishning patogenezi termoregulyatsiya neyrotransmitterlarining sekresiyasi buzilishi sababli gipotalamus tuzilmalari va vegetativ muvozanatning buzilishi bilan bog‘liq bo‘lib, markaziy asab tizimi neyronlarining sinapslarida noradrenalin va serotonin miqdorining oshishi termoregulyatsiya zonasini kamaytiradi [18, 12]. Isib ketishning «periferik» mexanizmi tomirlar atrofidagi semiz hujayralarining degranulyatsiyasi bilan bog‘liq [15].

Estrogenlar teri qoplamalariga kuchli ta’sir ko‘rsatadi: «….epidermis hujayralarining proliferatsiyasi va differensiatsiyasini, fibroblastlarning ishlashini va mitotik faolligini ta’minlaydi, fibroblastlar tomonidan kollagen va elastik tolalar sintezini kuchaytiradi, kollagen hosil bo‘lishi va parchalanishini tartibga soladi, terining suv balansini muvozanatda saqlaydi» [8].

Klimaks davrida estrogenlarning fiziologik kamayishi terining tabiiy qarishi bilan tavsiflanadi: «...noziklashish, ajinlar, quruqlik va qotishmalar, travmatizatsiyaga va yaxshi sifatli hosilalarga moyillik, terining kulrang tus olishi, teri turg‘orining va elastikligining pasayishi, qalinligining kamayishi, pigmentli dog‘lar paydo bo‘lishi, poralarning kengayishi, epidermisning yangilanishining sekinlashishi bilan tavsiflanadi» [23, 21].

Jahon sog‘liqni saqlash tashkiloti ma’lumotlariga ko‘ra, menopauza 45 yoshdan keyin boshlanadigan tuxumdonlar ekspressiyasining fiziologik pasayishi davri bo‘lib, o‘z ichiga premenopauzani, menopauza boshlanganidan boshlab 12 oyni va oxirgi hayzdan keyin 24 oyni o‘z ichiga oladi. Bu davrda tuxumdonlarning follikulyar tizimining so‘nishi va menopauza boshlanishidan uzoq vaqt oldin FSG konsentratsiyasining oshishi kuzatiladi; shuni ta’kidlash lozimki, FSG konsentratsiyasi sekinlik bilan, hatto menopauzaning boshlanishiga qadar uzluksiz o‘sish xususiyatiga ega [14]. Shu bilan birga, ootsit apoptozi tezligining oshishi, granulyoz va teka hujayralarining nobud bo‘lishi bilan birga primordial tipdagi follikullar atreziyasi tezligining oshishi kuzatiladi [19, 29], shuni ta’kidlash kerakki, stroma har doimgidek androstendion va testosteron ishlab chiqarishda davom etadi [9, 22]. Ushbu jarayon mobaynida tuxumdonlar massasi boshlang‘ich vaznidan 2 barobar kamayadi, atrofiyalangan qismlari esa gialinizatsiya va sklerozlanish elementlari bo‘lgan biriktiruvchi to‘qimaga almashinadi. Androgenlar hosil bo‘lishining ortishi organizmda ularning ekstragonadal yullar orqali estronga aylanishini rag‘batlantiradi [20, 28].

Bu davrda steroid gormonlar giposekresiyasi tufayli endometriyda atrofik va giperplastik jarayonlar, bezli-kistoz giperplaziyalar va o‘choqli polipoz o‘zgarishlar qayd etiladi [20]. Endometriy poliplari yoki ularning diffuz giperplaziya bilan kombinatsiyasi kuzatiladi [26].

Estrogen va uning hosilalari ishlab chiqarilishinining pasayishi premenopauzal va postmenopauzal davrda gipofiz bezida gonadotrop gormonlarining gipersekresiyasiga olib keladi [12].

Premenopauzal davrda gipotalamus gonadotropin-rilizing gormonlar ishlab chiqarilishining kamayishi va bosqichma-bosqich to‘xtatilishini o‘z ichiga olgan xususiyatlarni namoyon qiladi. Bunday pasayish jinsiy gormonlarni nazorat qilishga qaratilgan gipofiz bezi faoliyatining susayishiga olib keladi. Gonadotropinlar konsentratsiyasi steroidlar sintezidagi almashinishlar tufayli ortadi. Ushbu jarayon mobaynida estronning ustunligi qayd etiladi, uning hosil bo‘lishi sutkasiga 40 mkg ga yetadi, shuni ta’kidlash lozimki, 98% hollarda estron androstenediondan sintezlanadi. Follikul stimullovchi gormon konsentratsiyasining ortishi menopauza boshlanishidan bir necha yil oldin aniqlanadi, luteinlovchi gormon konsentratsiyasi esa ancha keyinroq ortadi. Shuni ta’kidlash joizki, 30% androstendion tuxumdonlarda hosil bo‘ladi va bu davrda reproduktiv yoshga nisbatan progesteron shakllanishining sezilarli darajada pasayishi kuzatiladi; shuningdek, bu davrda testosteron shakllanishining pasayishi kuzatiladi, ammo bu holat estrogen darajasiga nisbatan kamroq seziladi [17].

Ko‘pchilik ayollarda perimenopauza davrida kalsiyning ichaklarda so‘rilishi pasayishi kuzatiladi. Ayrim mualliflarning fikriga ko‘ra, «... 78% ayollarda suyaklarning qayta tiklanishi buziladi, giperkalsiemiya va giperfosfatemiya esa erta menopauzal davrda aniqlanadi» [18].

Yuqorida keltirilgan ma’lumotlarning barchasi bizga o‘tish davri buzilishlari uchrash darajasining yuqoriligi umumiy holat va mehnatga layoqatlilikga salbiy ta’sir ko‘rsatishini isbotlashga imkon beradi, bu esa ushbu muammoning tibbiy va ijtimoiy ahamiyatini belgilaydi. Premenopauza qanday kechishining aniq markerlari mavjud emasligi va turli xil omillarning ta’siri, masalan, ruhiy stress, travmalar, infeksion patologiya va shunchaki ortiqcha zo‘riqishlar fiziologik klimaksning patologik holatga aylanishiga sabab bo‘ladi.

Zamonaviy tekshirish usullardan foydalangan holda keng qamrovli tekshiruvlar patologik menopauza xavfi markerlarini individuallashtirishga hamda bunday ayollarga differensiallashgan ixtisoslashtirilgan yordam berish imkonini yaratadi.

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TUG'RUQDA ORALIQ SHIKASTLANISHLARINING SABABLARI, TARQALISHI VA ASORATI TAHLILI (ADABIYOTLAR TAHLILI)

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АНАЛИЗ ПРИЧИН, РАСПРОСТРАНЕННОСТИ И ОСЛОЖНЕНИЙ ТРАВМ ПРОМЕЖНОСТЕЙ ВО ВРЕМЯ РОДОВ (ОБЗОР ЛИТЕРАТУРЫ)

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ANALYSIS OF THE CAUSES, PREVALENCE AND COMPLICATIONS OF PERINEAL INJURIES DURING CHILDBIRTH (LITERATURE REVIEW)

Tos bo'shlig'i ko'p darajali tuzilishga ega va jinsiy a'zolarning tayanch apparatini tashkil etuvchi mushak, boylam va biriktiruvchi to'qimalarning turli birikmalaridan iborat [7]. Tos bo'shlig'ining birinchi qatlami kardinal-bachadon boylamlari va puboservikal fastsiya bilan ifodalanadi. Ularning asosiy vazifasi bachadon bo'yni va qin gumbazlari tos va dumg'azaning lateral devorlariga mahkamlashdir. Agar ushbu darajadagi nuqson paydo bo'lsa, jinsiy a'zolarning prolapsi oldingi qin devorning yuqori uchdan bir qismining tushishi sifatida namoyon bo'ladi [10].

Tos bo'shlig'ining birinchi qatlamidagi nuqsonlarning eng keng tarqalgan sababi bu tabiiy yo'llar orqali tug'ruqdir [1, 3, 7, 11]. Tug'ruqning ikkinchi bosqichida homila boshining uzoq vaqt davomida haddan tashqari ta'siri natijasida bachadon bo'yni fastsiya halqasidan sakroservikal va rektovaginal fastsiyaning ajralishi tufayli ko'ndalang nuqsonlar paydo bo'ladi. Pay markazining fastsiyasi, pubouretral va periuretral fastsiya pubouretral va uretropelvik boylamlar bilan birgalikda tos bo'shlig'ining ikkinchi darajasini tashkil qiladi. Ushbu kompleks levator ani mushagi bilan birgalikda qinning o'rta uchdan bir qismini tos bo'shlig'ining lateral devorlariga mahkamlaydi [1]. Ushbu darajadagi nuqsonlarning paydo bo'lishi puboservikal fastsiyaning lateral qirrasining qinning lateral devoridan pay yoyi darajasida ajralishi tufayli sistoseli va uretroselining shakllanishiga olib keladi. Uretrosele puboservikal fastsiyaning medial qirrasi simfiz ostidagi urogenital diafragmadan yirtilganda paydo bo'ladi. Rektovaginal to'siqning to'liq yirtilishida medial rekto- va enterosele hosil bo'ladi [6, 12].

Tos bo'shlig'ining uchinchi qatlami tashqi uretral boylam, urogenital va anal diafragma kiradi. Ushbu biriktiruvchi to'qima tuzilmalari qinning pastki qismini mustahkamlaydi. Ushbu darajadagi yorilish yoki nuqson bo'lsa, distal rektosele va / yoki stressli siydik tutolmaslik paydo bo'ladi [6, 7].

Oraliq sohasi shikastlanishi patogenezi to'liq tushunilmagan. Umuman olganda, zarar venoz chigalining siqilishi va qon aylanishining buzilishi natijasida boshlanadi, ya'ni venoz dimlanish patogenezning dastlabki bosqichiga aylanadi. Klinik jihatdan har qanday oraliq sohasi yirtilishi terining shishishi bilan boshlanadi (qonning suyuq qismini tomirlardan to'qimalarga haydash). Bundan tashqari, arteriyalar va tomirlarning siqilishi tufayli to'qimalarda metabolik jarayonlar buziladi. Natijada to'qimalarning elastik va himoya xossalari pasayadi, ular mustahkamligi va cho'ziluvchanligini yo'qotadi [3, 9].

Akusherlikda oraliq sohasi shikastlanishlari sabablari odatda mexanik va gistopatikga bo'linadi. Oraqli sohasi shikastlanishining mexanik sabablari orasida oraliq sohasi to'qimalarining haddan tashqari cho'zilishi kiradi: katta vaznli homilaning tug'ilishi, homila boshining no'to'g'ri joylashishi, tug'ruqning ikkinchi davrining cho'zilishi, jadal va tez tug'ruq [1, 7].

Tug'ruq paytida oraliq sohasi yirtilishining gistopatik sabablari, aksincha, oraliq sohasi to'qimalarining cho'zilishi va homilaning paydo bo'lgan qismiga moslashish qobiliyatining pasayishi bilan bog'liq [22, 50]. Bu tug'ruq kanalining yumshoq to'qimalari trofizmining buzilishi, genital tizimning yallig'lanish kasalliklari tufayli elastiklikning yo'qolishi va epiziotomiya yoki boshqa jarrohlik aralashuvlardan so'ng to'qimalarda chandiqli o'zgarishlar bilan bog'liq.

Tug'ruq paytida oraliq sohasi shikastlanishi - kamayish belgilarini ko'rsatmaydigan dolzarb muammo bo'lib qolmoqda. Turli manbalarga ko'ra, umumiy populyatsiyada tug'ruqdagi oraliq sohasi shikastlanishi darajasi 6,25 dan 85,0% gacha yetadi va ko'plab asoratlarga olib keladi [1, 3, 11, 33]. Bundan tashqari, birinchi marta tug'uvchi va qayta tug'uvchi ayollarda tarqalish sezilarli darajada farq qiladi, mos ravishda 1,4 dan 80,0% gacha va 0,4 dan 54,0% gacha [24, 34].

Tug'ruq paytida yumshoq to'qimalardan iborat tug'ruq kanalining shikastlanishi muammosi nafaqat anatomik shikastlanishni o'z ichiga oladi, balki u ancha kengroqdir, chunki etiologiya, xavf omillari, patogenez va hatto tashxis mezonlari bo'yicha ham yagona xulosa mavjud emas.

Zarar chuqurligiga qarab, barcha oraliq sohasi shikastlanishlari odatda to'rt darajaga bo'linadi [1]:

1-darajali - qinning pastki uchdan bir qismi, pastki komissura va oraliq sohasi terisining yaxlitligi 2 sm dan oshmay shikastlanadi (oraliq sohasi mushaklari shikastlanmagan holda)

2-darajali - qinning orqa devori, pastki komissura, oraliq sohasi terisi va tos bo'shlig'i mushaklarining yaxlitligi buzilishi bilan kechadigan shikastlanish

3-daraja - qinning orqa devori, pastki komissura, oraliq sohasi terisi va tos bo'shlig'i mushaklarining yaxlitligi buzilishi hamda, to'g'ri ichakning tashqi sfinkteri yorilishi kuzatiladi.

4-darajali - yuqorida ko'rsatilgan tuzilmalarning shikastlanishiga qo'shimcha ravishda, to'g'ri ichakning old devorining yorilishi paydo bo'ladi.

Bu tasnif, bir qator qarama-qarshiliklarga ega. Birinchidan, tug'ruq paytida homila boshining oldinga siljishi ichkaridan amalga oshiriladi. Shuning uchun teridan shikastlanadigan birinchi darajali yorilish chalkashlikka olib keladi, chunki yoriqlar tashqi tomondan ichkariga o'tadi. Ikkinchidan, to'rtinchi darajali oraliq sohasi yorilishi to'g'ri ichak devorining shikastlanishini o'z ichiga oladi. Ammo oraliq sohasi faqat m.sphincter ani dan iborat ekanligini tushunish uchun tos bo'shlig'ining anatomiyasini yuzaki bilish ham yetarli, ya'ni to'g'ri ichak devorining shikastlanishi uchinchi darajali oraliq sohasi yorilishining asoratlari sifatida alohida tashxis sifatida qaralishi kerak.

Birinchi darajali yorilishlar birinchi marta tug'uvchi ayollarning 76,7 foizida va qayta tug'uvchi ayollarning 43,1 foizida, ikkinchi darajali yorilish birinchi marta tug'uvchi ayollarning 33,5 foizida va qayta tug'uvchi ayollarning 13,0 foizida uchraydi. Uchinchi darajali yorilish holatlari birinchi marta tug'uvchi ayollarda 6,0% va qayta tug'uvchi ayollarda 1,0% ni tashkil qiladi [26, 27].

Oraliq sohasi shikastlanishi uchun xavf omillari bo'yicha mavjud fikrlar juda xilma-xil bo'lib, ular orasida: onaning yoshi, pariteti, tug'ruq paytida onaning holati, tug'ruqning ikkinchi bosqichining davomiyligi, homila boshining noto'g'ri joylashishi ko'rinishlari, homila tana vazni, homilaning bosh aylanasi, dasturlashtirilgan tug'ruq, oksitotsin bilan tug'ruqni jadallashtirish, operativ tug'ruq [3, 41, 50].

Oraliq sohasining yorilishi uchun yaxshi o'rganilgan va shubhasiz xavf omili onaning pariteti, ya'ni birinchi tug'ilishdir. Oraliq sohasining shikastlanishi birinchi marta tug'uvchi ayollarda qayta tug'uvchi ayollarga qaraganda ikki baravar ko'proq uchraydi va bu ko'plab tadqiqotlarda o'z aksini topgan [42, 49]. Losdyck A. va boshqalar tomonidan olib borilgan tadqiqot (2024) tug'ruq paytida oraliq sohasining shikastlanishi xavfi onaning yoshi (35 yoshdan yuqori) va homiladorlik davri (40 haftadan ortiq) bilan sezilarli darajada oshishini tasdiqlandi [45]. Shuningdek, ko'pgina mualliflarning ta'kidlashicha, oraliq sohasining shikastlanishi chastotasi ikkinchi davrning davomiyligi 60 daqiqadan ko'proq, homila boshi aylanasi 35 sm dan ortiq va homila boshining noto'g'ri (yozilgan) joylashishi bilan ortadi [36, 44, 59].

Borrman M. va hammualiflar (2020) [25] oraliq sohasining shikastlanishi uchun yana bir mustaqil xavf omili homila vazni ekanligini tasdiqlashdi. Og'irligi 4000 g dan ortiq bo'lgan chaqaloqni tug'gan ayollar, undan kichikroq chaqaloqlarni tug'gan ayollarga qaraganda, oraliq sohasining shikastlanishi ehtimoli deyarli ikki baravar ko'pligi aniqlangan. Yana bir ziddiyatli xavf omili - bu tug'ruq paytida onaning holati. Wu J. va hammualliflardan olingan ma'lumotlar (2021) [62], shuni ko'rsatadiki tug'ruqning ikkinchi bosqichida onaning tik holati oraliq sohasining shikastlanishi holatlarini kamaytirmasligini ko'rsatdi. Ramar C. va boshqalar ham xuddi shunday xulosaga kelishdi (2024) [89].

Abntunes B. va boshqalar tomonidan o'tkazilgan tadqiqot (2020) [14] vertikal holatda tug'ruq uchinchi va to'rtinchi darajali oraliq sohasining yorilishi ko'payishini ko'rsatdi, lekin ikkinchi darajali yorilishlar hollarini sezilarli darajada kamaytirdi. Bir qator tadqiqotlar biosenoz buzilishining tug'ruq paytida oraliq sohasi shikastlanishiga ta'sirini o'rganib chiqdi. Homiladorlik davrida qin disbiozi sezilarli klinik ko'rinishlar va shikoyatlarsiz sodir bo'ladi, ammo tos bo'shlig'ining elastik xususiyatlarida sezilarli o'zgarishlarga olib kelishini ko'rsatishgan [37, 54-55].

Radzinskiy V.E va boshqalarning tadqiqotlariga ko'ra (2015), jinsiy a'zolar biosenozining buzilishi natijasida yuzaga keladigan oraliq sohasidagi shikastlanishlar disbioz bo'lmagan holatlarga qaraganda 32,2% ko'proq uchraydi. Bu, o'z navbatida, tug'ruq kanali yumshoq to'qimalarining yirtilishini oldini olish uchun jinsiy yo'llarning yallig'lanish kasalliklarini o'z vaqtida tashxislash va davolash zarurligini ko'rsatadi.

Akusherlik va ginekologiya bo'yicha amaldagi qo'llanmalarga ko'ra, qindagi yallig'lanish jarayonlari tug'ruq kanalining yumshoq to'qimalariga sezilarli darajada katta shikastlanishga olib keladi [1, 5, 6]. Turli xil tadqiqotlarning ilgari aytib o'tilgan xulosalari qaysi xavf omili tug'ruq paytida oraliq sohasi shikastlanishi rivojlanishining prognozchisi ekanligi haqidagi savolga aniq va to'g'ri javob bermaydi, bu esa o'z vaqtida bashorat qilish va oldini olishni murakkablashtiradi.

Bir qarashda, tug'ruq paytida oraliq sohasi shikastlanishini tashxisi oddiy ish kabi ko'rinishi mumkin. Har bir tabiiy tug'ruqdan keyingi erta davrda tug'ruq kanalining yumshoq to'qimalarini tekshirish zarurdir va bu aniq oraliq sohasi shikastlanishlarni aniqlash imkonini beradi. Biroq, tos bo'shlig'ining yashirin shikastlanishini aniqlash uchun batafsilroq tahlil qilish kerak. "Yashirin" oraliq sohasi shikastlanishlarning chastotasi anamnez ma'lumotlariga ko'ra bir marta tug'gan ayollarning 8,1-10,5% ga va qayta tug'uvchi ayollarda 22,8-31,9% ga yetadi [2, 27, 28, 43]. Bundan tashqari, bunday jarohatlarning tashxisi vizual diagnostika usullariga asoslangan - transperineal ultratovush va oraliq sohasi magnit-rezonans tomografiya (MRT) [44, 61]. Taithongchai A. va hammualliflari tadqiqotida aniqlangan sonografik tasvirga ko'ra (2020) [101], barcha bemorlarda oraliq sohasi shikastlanishi o'ziga xos ko'rinishga ega va orqa komissuraning chap yoki o'ng tomonida, anal halqasidan o'rtacha 3,1 sm masofada joylashgan. Toktar L.R. “yashirin” oraliq sohasi jarohatlarining barcha holatlarida shikastlanish shakli chiziqli bo‘lmaganligini, u yoysimon qiyshiq medianali deformatsiyalangan uchburchak, ya’ni “tungi qalpoq” ko‘rinishida ekanligini o'z ishlarida ko‘rsatdi [9].

Oraliq sohasi uchun MRT diagnostikasi usuli mashhur bo'lib bormoqda. Bir qator mualliflar tug'ruqdan keyingi oraliq sohasi shikastlanishini to'g'ri va aniq baholash uchun ishonchli vosita sifatida magnit-rezonansli defekografiya (defekatsiya paytida tos bo'shlig'ining dinamik vizualizatsiyasi) haqida ma'lumotlar keltirishmoqda [15]. Ammo uning yuqori narxi tufayli u transperineal ultratovushdan sezilarli darajada kam ishlatiladi. O'Leary B. va hammualliflari tomonidan olib borilgan tadqiqotda (2023) [51], oraliq sohasining MRT asosida yashirin perineal travma holatlarining uchdan bir qismi asimptomatik tos bo'shligi mushaklarining yetishmovchiligi bilan xastalangan bemorlarda tug'ruqdan keyingi kech davrda tashxis qo'yilganligini aniqlashgan. Flores-DelaTorre M. va hammualliflari (2021) ta'kidlashicha, tos bo'shlig'ining MRT tos bo'shlig'i disfunksiyasini ko'rsatishi mumkin, ammo to'liq diagnostika usuli emas [33]. Zararlangan oraliq sohasini to'liq tekshirish va yuqori sifatli tiklash kelajakda tos bo'shlig'ini saqlab qolishning kalitidir. Perineorafiya - maksimal ta'sirga erishish uchun bir qator xususiyatlarni o'z ichiga olishi kerak, jumladan chok materiali sifatida faqat sintetik so'rilishi mumkin iplardan foydalanish; shikastlangan mushaklarni ehtiyotkorlik bilan tekislash bilan yarani to'g'ri va o'z vaqtida tikish; yetarli darajada og'riqsizlantirish. Tug'ruq paytida oraliq sohasi shikastlanishining oldini olish masalasi juda munozarali bo'lib qolmoqda, chunki qaysi usullar eng samarali ekanligi haqida aniq fikr yo'q. Tug'ruq paytida oraliq sohasi yirtilishlarini oldini olish uchun ko'plab turli usullar ishlab chiqilgan. Masalan, oraliq sohasi shikastlanishining oldini olishda zamonaviy akusherlikda eng ko'p qo'llaniladigan usul sifatida

epiziotomiya katta rol o'ynaydi. "Epiziotomiya" atamasining o'zi tug'ruq paytida bola boshining o'z-o'zidan yorishi va travmatik miya shikastlanishiga yo'l qo'ymaslik uchun oraliq va qinning orqa devorini kesishni anglatadi [1]. Turli mamlakatlarda epiziotomiyaning tarqalishi 10 dan 75% gacha ekanligi aniqlangan. Global ma'lumotlar epiziotomiya tarqalishida sezilarli o'zgaruvchanlikni ko'rsatadi. Jahon sog'liqni saqlash tashkiloti tug'ruqning atigi 10 foizida oraliq sohasini jarrohlik yo'li bilan kesish kerak, deb ta'kidlaydi. Ammo bu yondashuv faqat oz sonli mamlakatlarda qo'llanilgan (Shvetsiya (6,6%), Islandiya (7,2%) va Daniya (4,9%)). Boshqa mamlakatlarda epiziotomiyaning quyidagi ko'rsatkichlari juda baland, masalan, Avstraliya (26,2%), Kanada (27,0%), AQSh (45,6%), Buyuk Britaniya (15,2%), Xitoy (75,5%), Tayvan (91,0%) [24, 29, 35, 64]. Rossiya Federatsiyasida oraliq sohasi disseksiyasi barcha tabiiy tug'ruqlarning 21,0-36,0 foizida amalga oshiriladi. O'zbekistomda esa aniq ko'rsatkichlar keltirilmagan, lekin kam sonli tadqiqotlar 25-40% atrofidagi ma'lumotlar keltirilgan. Ushbu topilma epiziotomiyani amalga oshirish sabablarini qayta ko'rib chiqish va chuqurroq tahlil qilish zarurligini ko'rsatadi. Epiziotomiyaning maqsadi homila boshining o'tishini osonlashtirish uchun qin teshigining diametrini oshirish va ideal holda qin yirtilishining oldini olishdir. Akusherlik holatiga qarab, epiziotomiya kesmalarining bir nechta turlari qo'llanilishi mumkin: o'rta, o'rta-lateral, lateral [35]. Ko'pgina mamlakatlarda "oltin" standart o'rta-lateral epiziotomiya hisoblanadi, ammo onaning oraliq sohasi shikastlanishining oldini olishda o'rta-lateral epiziotomiyaning himoya xususiyatlari haqida hali ham aniq fikr mavjud emas. Shmidt P. va hammualliflarining ma'lumotlariga ko'ra (2024) [55], o'rta-lateral epiziotomiya oraliq sohasi yorilishlarini kamaytiradi. Xu B. va hammualliflar tomonidan o'tkazilgan tadqiqot (2022) [63], aksincha, qarama-qarshi tendentsiyani ko'rsatib, o'rta-lateral epiziotomiyadan foydalanganda oraliq sohasi shikastlanishlarining ortishini, ayniqsa, uchinchi va to'rtinchi darajali oraliq sohasi yirtilishlarining sonining ko'payishini aniqlashgan edi. Epiziotomiyani yorilishlar oldini olishning odatiy usuli sifatida qo'llashning maqsadga muvofiqligi masalasi ham ochiq qolmoqda. Selektiv epiziotomiya qin va oraliq sohasi jarohatlarining 30,0% ga kamayishiga olib kelishi mumkin [64]. Optimal epiziotomiya ko'rsatkichi (10,0%) bilan uchinchi va to'rtinchi darajali oraliq sohasi yirtilishlarining past darajasi asoratlanmagan qin orqali tug'ruq uchun akusherlik yordamining tegishli sifatini aks ettiruvchi ko'rsatkichlar sifatida ko'rib chiqish kerak [17, 35].

Profilaktik maqsadlarda epiziotomiya jarrohlik usuli bilan tug'ruqni tugatish paytida (vakuum ekstraktori yoki akusherlik qisqichlari yordamida), yelkachalar distotsiyasida, oraliq sohasining qo'pol chandiqli deformatsiyasida tavsiya etiladi [23, 38]. Aquino C. va boshqalar tomonidan olib borilgan tadqiqotda (2020) [17], tug'ruq vaqtida oraliq sohasini himoya qilishning profilaktik usullarining samaradorligini baholadi. Oraliq sohasi massaji va iliq kompresslarni qo'llash, shuningdek, oraliq sohasini himoya qilish uchun akusherlik yordamini ko'rsatish bilan jarohatlar sonini kamaytirishning ijobiy tendensiyasi qayd etildi. Goh Y. va boshqalar (2021) ta'kidlaganidek, perineal massaj uchinchi va to'rtinchi darajali oraliq sohasi yirtilishlari sonining kamayishiga, shuningdek epiziotomiyalar sonining kamayishiga yordam berdi. Tug'ruqning ikkinchi bosqichida oraliq sohasi massajining himoya xususiyatlari bir qator boshqa tadqiqotlarda ham qayd etilgan [13, 18, 19]. Tug'ruq ikkinchi bosqichining mexanizmi homila boshining tug'ilish kanali orqali bosqichma-bosqich, silliq va uzluksiz harakatlanishini o'z ichiga oladi. Tug'ruqning tabiiy mexanizmidan og'ish bo'lsa, turli og'irlikdagi oraliq sohasi shikastlanishlari va homila gipoksiyasi kabi asoratlar muqarrar bo'ladi. Homilaning boshi bilan kelishida klassik qo'l yordamini ko'rsatish ushbu asoratlar xavfini kamaytiradi. Bir qator mualliflar akusherlik klassik qo'l yordamidan oraliq sohasi jarohatlariga qarshi profilaktika chorasi sifatida samarali foydalanish haqida xabar berishadi [15, 48]. Pirs-Williams R. va boshqalar tomonidan olib borilgan tadqiqotda (2020) [53], qarama-qarshi ma'lumotlarni ko'rsatdi: ular tug'ruqni boshqarishning ikkita usulini solishtirdilar - perineal himoya yordami bilan "hands on»" va "hands off" yordamisiz, oraliq sohasi jarohatlar chastotasi "hands off (qo'llarsiz)" guruhida (24,0% ga nisbatan 45,0%) nisbatan sezilarli darajada past edi. "Kechiktirilgan kuchanchiqlar" texnikasi ham oraliq sohasi shikastlanishiga (OSSh) nisbatan himoya xususiyatlariga ega. Bir nechta tadqiqotlar "kechiktirilgan kuchanchiqlar" dan foydalanish bilan 3 va 4 darajali jarohatlarning sezilarli darajada kamayishini tasvirlab berdi.

OSSh ning asosiy oqibatlari tug'ruqdan keyin turli vaqtlarda sodir bo'ladi. Ular odatda tug'ruqdan keyin 1 yil ichida shakllanadigan "erta" va 15-20 yildan keyin shakllanadigan "uzoq" ga bo'linadi. OSShning asoratlari quyidagilardan iborat: tos bo'shlig'i mushaklarining yetishmovchiligi, siydik va najasni ushlab turolmaslik, dispareuniya, tos a'zolarining tushishi (TAT) [16, 21]. Tug'ruqdan bir yil o'tgach, OSShning ushbu asoratlari o'rtacha 7,0-10,0% ni tashkil qiladi, 15 yildan keyin tarqalish sezilarli darajada oshadi va 12,0 dan 59,0% gacha o'zgaradi [4, 58].

Epidemiologik tadqiqotlarga ko'ra, OSShning eng ko'p uchraydigan asoratlari tos bo'shlig'i mushaklari yetishmovchiligi va tos a'zolari tushishi hisoblanadi [29]. Åkervall S. va boshqalar tomonidan o'tkazilgan tadqiqot (2020) tug'magan va kesarcha kesish yo'li bilan tug'gan ayollarda simptomatik prolapsning tarqalishi nisbatan o'xshashligini va 40 yoshdan 64 yoshgacha bo'lgan ayollarda 5,0% dan kam ekanligini ko'rsatdi. Aksincha, tabiiy tug'ruqdan keyin ayollarda 65 yoshga to'lgunga qadar simptom beruvchi jinsiy a'zolarning prolapsi ko'paygan. Shunday qilib, 40-64 yoshdagi odamlarda tabiiy tug'ruqning salbiy ta'siri sifatida simptom beruvchi jinsiy a'zolar prolapsi ehtimoli kesarcha kesish yo'li bilan tug'ganlar bilan solishtirganda 12 baravar yuqori (13,4% ga nisbatan 1,1%) [16].

Oraliq sohasi yirtilishining keyingi keng tarqalgan asoratlari siydik tutolmaslik 25,0% holatlari OSSh bilan bog'liq [31, 39].

Von Aarburg N. va boshqalar (2021) homiladorlik davrida stressli siydik tutolmaslik epizodlari ham paydo bo'lishi mumkinligini ko'rsatishdi [60]. Tug'ruqdan keyin siydik tutolmaslikning tuzilishi quyidagicha: stressli siydik tutolmaslik - 44,9%, urgent siydik tutolmaslik - 38,2%, ayollarning 16,9 foizida aralash tipdagi siydik tutolmaslik holatlari kuzatiladi [60].

Anal sfinkterning akusherlik shikastlanishi bilan asoratlangan tabiiy tug'ruqdan keyin najasni ushlab turolmaslik xavfi ortadi. Tabiiy tug'ruqdan keyingi najasni ushlab turolmaslik uchun xavf omillari 35 yoshdan oshgan ona yoshi, 4000 gr dan ortiq bolaning vazni va instrumentlar qo'llanilgan tug'ruqdir [30, 50-52]. Sideris M. va boshqalar tomonidan o'tkazilgan tadqiqot (2020), tug'ruqdan keyingi dastlabki 12 oy ichida najasni ushlab turolmaslikning tarqalishi 13,0-19,0% ni tashkil qilganini aniqladi [58]. III va IV darajali oraliq sohasi yirtilishlari uzoq muddatli davrda tos bo'shlig'i mushaklari yetishmovchiligi va najasni ushlab turolmaslik xavfini deyarli 1,5 baravar oshiradi [16, 32].

Ayollarning 25,8 foizida tug'ruqdan keyingi jinsiy disfunksiya oraliq sohasi shikastlanishi bilan asoratlangan tug'ruqlarda kuzatiladi. Tabiiy tug'ruqdan keyin to'g'ri ichakni ko'taruvchi mushaklarning yirtilishi tug'ruqdan keyingi 6 oy ichida ayollarda jinsiy disfunksiyani sezilarli darajada oshiradi, hamda tug'ruqdan keyin 12 oy o'tgach, III-IV darajali yirtilish bo'lgan ayollarning yarmidan ko'pi dispareuniyadan aziyat chekishadi. Ushbu mushak yirtilishi bo'lgan ayollarda mushaklarning yirtilishi bo'lmagan ayollarga qaraganda, istak, qo'zg'alish, orgazm va qoniqish darajasi sezilarli darajada past bo'lgan [32, 34, 40].

Xulosa. Tos bo‘shlig‘i va oraliq sohasining shikastlanishlari tug‘ruq jarayonida keng tarqalgan muammo bo‘lib, ayollarning sog‘lig‘iga jiddiy ta’sir ko‘rsatadi. Tos bo‘shlig‘i tuzilmalarining ko‘p qatlamli tuzilishi va tug‘ruq paytida homila boshining haddan tashqari bosimi natijasida yuzaga keladigan shikastlanishlar, ayniqsa birinchi marta tug‘uvchi ayollarda, ko‘plab asoratlarga olib keladi. Tos bo‘shlig‘ining birinchi, ikkinchi va uchinchi qatlamlaridagi shikastlanishlar jinsiy a’zolarning prolapsi, siydik tutolmaslik, najasni ushlab turolmaslik va jinsiy disfunksiya kabi jiddiy oqibatlarga sabab bo‘ladi.

Oraliq sohasining shikastlanishi mexanik va gistopatik sabablarga ko‘ra yuzaga keladi. Mexanik sabablar orasida homila vazni, tug‘ruqning ikkinchi bosqichining cho‘zilishi, homila boshining noto‘g‘ri joylashishi kabi omillar mavjud. Gistopatik sabablar esa oraliq sohasi to‘qimalari elastikligining pasayishi, yallig‘lanish kasalliklari va trofizmning buzilishi bilan bog‘liq.

Oraliq sohasining shikastlanishini oldini olish uchun epiziotomiya, oraliq sohasi massaji, iliq kompresslar va tug‘ruq paytida to‘g‘ri

akusherlik yordami ko‘rsatish kabi usullar qo‘llaniladi. Biroq, epiziotomiyaning samaradorligi va zarurligi haqida hali ham munozaralar mavjud. Ba’zi tadqiqotlar epiziotomiyani oraliq sohasining shikastlanishini kamaytirishda samarali deb hisoblasa, boshqalar esa uchinchi va to‘rtinchi darajali yorilishlar xavfini oshirishi mumkinligini ta’kidlaydi.

Tug‘ruqdan keyin oraliq sohasining shikastlanishi bilan bog‘liq asoratlar uzoq muddatli davrda tos bo‘shlig‘i mushaklarining yetishmovchiligi, siydik va najasni ushlab turolmaslik, jinsiy disfunksiya va tos a’zolarining tushishi kabi muammolarni keltirib chiqaradi. Bu asoratlar ayollarning hayot sifatini sezilarli darajada pasaytiradi va ularning jismoniy va psixologik holatiga salbiy ta’sir ko‘rsatadi.

Shuning uchun, tug‘ruq paytida oraliq sohasining shikastlanishini oldini olish, shikastlanishlarni to‘g‘ri tashxislash va davolash, shuningdek, tug‘ruqdan keyin yuzaga keladigan asoratlarni minimallashtirish uchun samarali profilaktika va davolash usullarini ishlab chiqish zarur. Bu borada ko‘proq tadqiqotlar olib borish va klinik amaliyotda zamonaviy usullarni joriy etish orqali ayollarning sog‘lig‘ini yaxshilash mumkin.

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SURUNKALI BUYRAK KASALLIGIDA SARKOPENIYANING UCHRASHI VA UNING TURLI HOLATLARDA RIVOJLANISH MEXANIZMLARI (ADABIYOTLAR TAHLILI)

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ВСТРЕЧАЕМОСТЬ САРКОПЕНИИ ПРИ ХРОНИЧЕСКОЙ БОЛЕЗНИ ПОЧЕК И МЕХАНИЗМЫ ЕЕ РАЗВИТИЯ В РАЗЛИЧНЫХ СОСТОЯНИЯХ (ОБЗОР ЛИТЕРАТУРЫ)

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FREQUENCY OF SARCOPENIA IN CHRONIC KIDNEY DISEASE AND MECHANISMS OF ITS DEVELOPMENT IN VARIOUS CONDITIONS (LITERATURE REVIEW)

Surunkali buyrak kasalligi (SBK) XXI asr pandemiyasi ko‘rinishini olib, hayot sifatining keskin yomonlashishi va o‘limning asosiy sabablaridan biriga aylandi. Yer kurrasida, shu jumladan Respublikamizda, semiz va qandli diabetga uchragan bemorlar sonining tobora oshib borishi SBK bilan og‘rigan hastalarning ham ko‘payishiga olib kelmoqda. 2017 yilda dunyoda taxminan 843,6 million kishi bu og‘ir asoratdan aziyat chekkan [21]. Ba'zi ma'lumotlarga ko‘ra, buyrak yetishmovchiligining so‘nggi bosqichi (BESB) bilan og‘rigan bemorlarda o‘lim ko‘rsatkichi pasaygan bo‘lsa ham, Global Burden of Disease (GBD) tadqiqotlari SBK butun dunyo bo‘ylab o‘limning yetakchi sabablaridan biriga aylanganini ko‘rsatmoqda [14, 29].

2019 yilda chop etilgan boshqa bir maqolada dunyoda taxminan 850 million kishi SBK ga chalinganligi ko‘rsatilgan. Ularning aksariyati past va o‘rtachadan past daromadli mamlakatlarda istiqomat qiluvchi insonlardir. Bemorlarning katta qismi buyrak kasalligini aniqlash, oldini olish yoki davolash imkoniyatiga ega emas [21].

Afsuski, SBK tarqalishini dinamikada o‘rganadigan tadqiqotlar sezilarli darajada kam. Chunki bu bir xil aholi guruhini o‘xshash usullar yordamida qayta baholashni talab qiladi. Amerika Qo‘shma Shtatlarida kasalliklarni nazorat qilish va oldini olish markazlarida olib borilgan SBK kuzatish tizimi ma'lumotlariga ko‘ra, 1988-1994 yillarda SBK ning 1-4 bosqichlari tarqalishi 11,8% ni tashkil etgan bo‘lsa, 2015-2016 yillarga kelib bu ko‘rsatkich 14,2% gacha oshgan [5]. Milliy sog‘liq va ovqatlanish tekshiruvi ma'lumotlarini tahlil qilgan tadqiqot shuni ko‘rsatdiki, bu o‘sish chiziqli bo‘lmay, SBK 3-4 bosqichining tarqalishi 1990 yillardan 2000 yillargacha oshgan bo‘lsa ham, undan keyin barqaror holda qolganligi ko‘rsatilgan [23]. Norvegiyada ham 1995-2008 yillar oralig‘ida 1-5 bosqich SBK ning shunga o‘xshash barqaror tarqalishi qayd etilgan [18]. Ulardan farqli o‘laroq, Buyuk Britaniyaning milliy vakillik sog‘liq tekshiruvi ma'lumotlariga ko‘ra, 3-5 bosqichdagi SBK ning tarqalishi 7 yil ichida sezilarli darajada pasaygan. Ushbu tadqiqotda 2003 yilni 2009/2010 yil bilan taqqoslaganda hisoblangan koptokchalar filtratsiyasi tezligi (hKFT) 1 daqiqada 1,73 m2 tana sathiga 60 ml dan kam bo‘lishi uchun moslashtirilgan imkoniyatlar nisbati 0,73 ni (95% ishonch intervali (II), 0,57-0,93) tashkil etgan [1]. So‘nggi yillarda ayrim mamlakatlarda kuzatilayotgan SBK tarqalishining barqarorlashishi yoki yaxshilanish sabablari noaniqligicha qolmoqda. Bunday moyilliklar qandli diabet va semizlik kabi SBK ning keng tarqalgan xavf omillarining ko‘payishiga qaramay kuzatilmoqda. Lekin ushbu davrda arterial gipertenziyani nazorat qilish ijobiy tomonga o‘zgarganini ta'kidlash lozim [1].

Nashr etilgan tadqiqotlar natijalarini turli aholi guruhlari va turli davrlarda o‘tkazilgan tarqalishni baholash nuqtai nazaridan talqin qilish murakkab, chunki yosh, jins va irq kabi xususiyatlar kasallanish ko‘rsatkichlariga katta ta'sir ko‘rsatadi [17]. Shuningdek, tarqalish va omon qolish darajasidagi o‘zgarishlar yoki tashxis qo‘yilgan SBK ning uzoqroq davom etishi sababli farq qilishi mumkin (masalan, ob'ektiv skrining natijasida). SBK tarqalishining umumiy o‘zgarishlari bir necha omillarning birgalikdagi ta'siri natijasida yuzaga kelish ehtimoli mavjud.

Mushak massasining yo‘qotilishi SBK bilan og‘rigan bemorlarda, ayniqsa uning so‘nggi bosqichlarida keng tarqalgan asorat hisoblanadi [28]. Buning sabablari turli xil bo‘lib, kasallik pirovardida oqsil parchalanishining kuchayishi va uning sintezining pasayishiga olib keladi, natijada uning muvozanati salbiy tomonga buziladi [33]. Bu holat oqibatda uzoq vaqt davomida asosan to‘yib ovqatlanmaslik bilan bog‘liq deb hisoblangan oqsil-energiya tanqisligi deb ataladigan ovqatlanishning buzilishiga olib keladi [13]. OET yoki to‘yib ovqatlanmaslikdan tashqari, sarkopeniya va kaxeksiya atamalari ko‘pincha SBK da kuzatiladigan mushak massasining yo‘qotilishi bilan bog‘liq ovqatlanish buzilishlarini anglatadi. Ushbu holatlar umumiy mezonlar va klinik natijalarga ega. Sof to‘yib ovqatlanmaslik - bu energiya va ozuqa moddalarini yetarli darajada qabul qilmaslik natijasida tana vazni, mushak massasi va tana yog‘ining yo‘qotilishi, OET esa shunga o‘xshash mezonlarga ega, ammo qo‘shimcha etiologik omil sifatida past darajadagi yallig‘lanish bilan kechadi [13]. Sarkopeniya esa qarish bilan birga kuzatiladigan mushak massasi va kuchining yo‘qolishi sifatida tushuniladi.

Mushak yo‘qotilishi SBK da ko‘p uchraydigan holat bo‘lib, ayniqsa uning og‘ir bosqichlaridagi, shu jumladan gemodializ (GD) qabul qilayotgan BESB bilan og‘rigan bemorlarda kuzatiladi [28].

Shuningdek, umumiy aholidagi sarkopeniyaning ta'riflarini aniqlab olish muhimdir. Ushbu ta'riflar dastlab keksa yoshdagi insonlarda harakatchanlikni yo‘qotish xavfini va funksional holatning pasayishini bashorat qilish uchun ishlab chiqilgan. Biroq, keksa yoshdagilarning 92% da kamida bitta surunkali kasallik mavjudligini hisobga olgan holda, sarkopeniyani aniqlashda qarish va ularning birgalikdagi ta'sirini hisobga olish zarur [20]. SBK ko‘pincha “tezlashgan qarish” modeli deb ham ataladi [34]. Shu sababli sarkopeniyaning tarkibiy qismlari (past mushak massasi, kuchi va faoliyati) va nogironlik hamda o‘lim bilan bog‘liqlik natijalari o‘rtasidagi aloqa yo‘nalishi umumiy aholi bilan bir xil bo‘lishi mumkin. Shunga qaramay, ushbu bog‘liqliklarning darajasi, ehtimol, SBK da uning mushaklarga mustaqil ta'siri tufayli kuchliroq va yaqqolroq namoyon bo‘ladi. Amalda, gemodializ olayotgan bemorlarda mushaklarning yo‘qotilishi yosh bemorlarda sodir bo‘ladi va unga mos keladigan nazorat guruhlariga nisbatan sezilarli darajada kuchliroq kechadi [25]. Shu sababli, hozirda umumiy aholida sarkopeniyani klinik jihatdan aniqlash uchun qo‘llaniladigan chegaraviy qiymatlar SBK, shu jumladan dializ olayotgan bemorlar uchun mos kelmasligi mumkin. Tana tarkibining past oziqaviy ko‘rsatkichi qanday ekanligini aniqlash vakillik populyasiyasida uning me'yoriy taqsimlanishiga bog‘liq.

Yuqorida aytilganidek, SBK bilan og‘rigan bemorlarda tezlashgan qarish fenotipi namoyon bo‘lganligi sababli, keksalarda kuzatilgan o‘zgarishlarga o‘xshab, mushak kuchi va faoliyatining pasayishi uning massasining yo‘qotilishi bilan namoyon bo‘ladi [16]. Zo‘rayib boruvchi SBK ning hayvon modelidan foydalangan holda o‘tkazilgan tadqiqotda, nazorat guruhi bilan taqqoslaganda, ushbu asorat mavjud kalamushlarning mushak massasi o‘zgarmagan bo‘lsa ham, uning faoliyati pasayganligi ko‘rsatilgan. Buning o‘rniga, mushaklar sifatining o‘zgarishi va uning tolalari atrofiyasining kuchayishi kuzatilgan [24]. Fahal va hammualliflar dializ bilan davolanayotgan bemorlarda mushak kuchsizligidagi o‘zgarishlarni o‘rganishgan [11]. Ular to‘rt boshli mushak kuchi va qisqarish xususiyatlarini tekshirish bilan birga, gemodializ va peritoneal dializ qabul qilayotgan bemorlar hamda sog‘lom nazorat guruhlarida mushak biopsiyasi yordamida tolalar turlarini miqdoriy baholaganlar. Unda dializ olayotgan bemorlarda mushak kuchi sog‘lom nazorat guruhidagilarga nisbatan pastligi va to‘yib ovqatlanmaganlarida yaxshi ovqatlanganlarga qaraganda quvvatsizroq bo‘lgani aniqlangan. Shuningdek, dializ va nazorat guruhi o‘rtasidagi eng sezilarli farq mushakning sekinroq bo‘shashishi hisoblanib, bu uning massasidan qat'iy nazar, kuchi va qisqarishiga salbiy ta'sir ko‘rsatishi mumkin. Yuqoridagilar bilan bir qatorda dializ olayotgan bemorlarining 78% da mushak biopsiyalarida ba'zi morfologik o‘zgarishlar kuzatilgan, bunda I turdagi tolalar atrofiyasi bemorlarning 45% da va II turdagi tolalar atrofiyasi 40% da qayd etilgan. Bundan tashqari, to‘yib ovqatlanmagan dializ guruhida II turdagi tolalar maydoni yaxshi ovqatlangan guruhga nisbatan sezilarli darajada kichik bo‘lgan [11]. Ushbu natijalar mushak kuchining yagona belgilovchisi uning massasi emas, balki bo‘shashishi va atrofiyasi kabi boshqa omillar ham uning kuchini pastligini izohlashini tasdiqlaydi.

Darhaqiqat, tobora ko‘payib borayotgan dalillar SBK bosqichlari va sarkopeniya tarqalishi o‘rtasidagi ijobiy bog‘liqlikni ko‘rsatmoqda. Umuman olganda, SBK ning butun manzarasida sarkopeniyaning tarqalishi 4% dan 42% gacha kuzatiladi [6]. Avvalgi tadqiqotlarda dializ va buyrak transplantasiyasi o‘tkazgan bemorlarda sarkopeniyaning tarqalganligi haqida ma'lumot berilgan bo‘lsa ham, hozirgi kunda SBK aholisining butun qamrovini hisobga olgan holda uning tarqalishi haqida ishonchli ma'lumotlar mavjud emas [40]. Amaliyotga sarkopeniyaning og‘irlik darajasi tushunchasi ham kiritilgan bo‘lib, uning og‘ir shaklida barcha belgilari (ya'ni mushak kuchi, massasi va jismoniy faolligining pastligi) mavjudligi bilan tavsiflanadi [8]. SBK bilan og‘rigan bemorlarda sarkopeniya bilan bog‘liq belgilar va uning og‘ir kechishi kuzatiladigan holatlar soni klinik hamda ilmiy tadqiqotlar uchun qimmatli ma'lumot berar edi. Lekin qayd etilgan holatlar hali to‘liq o‘rganilmagan. Sarkopeniya va tananing ortiqcha yog‘liligining birgalikda kuzatilishi sarkopenik

semizlik deb ataladi. Bu holat turli aholi qatlamlari, shu jumladan SBK bilan og‘rigan bemorlar orasida sog‘liqni saqlashning muhim muammosi sifatida tan olingan [3]. Biroq, ushbu aholi guruhida ham sarkopenik semizlik kuzatiladigan bemorlar soni to‘g‘risida yetarli darajada ma'lumotlar mavjud emas.

Sarkopeniya hozirda kasallik sifatida qaralayotgani uchun, uning og‘irlik bosqichlarini aniqlash klinik natijalarga qanday ta'sir ko‘rsatishi mumkinligini tushunish uchun juda muhimdir [2]. SBK mavjud bo‘lmagan kattalarda o‘tkazilgan tizimli tahlil sarkopeniyaning global tarqalishi 10% dan 27% gacha, og‘ir sarkopeniya esa 2% dan 9% gacha o‘zgarib turishini ko‘rsatdi [26]. Marvery P. Duarte va hammualliflar tomonidan o‘tkazilgan tadqiqotda sarkopeniya (1 dan 83% gacha) va uning og‘ir darajasi (1% dan 75% gacha) umumiy aholiga nisbatan biroz yuqoriroq tarqalganligi aniqlangan [10]. SBK da sarkopeniyaning tarqalishini umumlashtiruvchi tizimli sharhlar va meta-tahlillar kam uchraydi va asosan dializ olayotgan bemorlar hamda buyrak transplantasiyasi o‘tkazgan shaxslar bilan cheklangan. Wathanavasin va hammualliflar dializ olayotgan bemorlarda sarkopeniyaning umumiy tarqalishi 25,6% (95% II: 22,1 dan 29,4 gacha) ekanligini aniqlaganlar [37]. Bu ko‘rsatkich Marvery P. Duarte va hammualliflar tomonidan o‘tkazilgan tadqiqotdagi (27%, 95% II: 24 dan 31 gacha) hamda Shu va hammualliflarning kuzatuvidagi (29%, 95% II: 23 dan 34 gacha) dializ natijalari bilan o‘xshash [10, 31]. Zhang va hamkasblar tomonidan o‘tkazilgan tadqiqotda buyrak transplantasiyasi amalga oshirilgan bemorlarda 26% (95% II: 20 dan 34 gacha) sarkopeniyaning umumiy tarqalishi kuzatilgan. Biroq, ko‘pchilik tadqiqotlarda sarkopeniyani faqat past mushak massasi nuqtai nazaridan tashxislangan. Shu o‘rinda bunday yondoshish hozircha ekspert guruhlari (sarkopeniya ta'rifi va natijalari konsorsiumi (SDOC), milliy sog‘liqni saqlash institutlari biomarkerlari konsorsiumi fondi sarkopeniya loyihasi (FNIH) va EWGSOP) tomonidan tavsiya etilmaydi [40]. Mualliflar mushak massasi va kuchi past yoki kamaygan jismoniy ko‘rsatkichlar birgalikda kelgan holatlardan foydalangan holda sarkopeniyani aniqlaydigan tadqiqotlar bo‘yicha qo‘shimcha tahlil o‘tkazganlar. Unda kuzatilgan tarqalish 21% (95% II: 15 dan 28 gacha) ni tashkil etgan. Bu ko‘rsatkich ushbu tadqiqotdagi buyrak transplantasiyasi o‘tkazgan bemorlar kichik guruhidagi natijaga (21%, 95% II: 14 dan 28 gacha) o‘xshash bo‘lgan.

Marvery P. Duarte va hammualliflar o‘z tadqiqotlarida dializ olayotgan bemorlarda og‘ir sarkopeniyaning sezilarli darajada yuqoriroq tarqalishini aniqlaganlar. Ushbu kuzatuvlar shuni ko‘rsatadiki, garchi sarkopeniyaning tarqalishi dializ holatiga ko‘ra farq qilmasa ham, uning og‘ir shakli va u bilan bog‘liq oqibatlarning soni dializ olayotgan bemorlar orasida yuqoriroq ekanligi qayd etilgan [10]. Og‘ir sarkopeniya uning yengil shakliga nisbatan ancha yomon oqibatlar bilan bog‘liq [38]. Dializ jarayoni o‘zining oqsil parchalanishini rag‘batlantirishi va uning sinteziga salbiy ta'sir ko‘rsatishi, bu esa mushaklarning tezroq yo‘qotilishiga olib kelishi mumkinligi aniqlangan [36]. Shunday qilib, jismoniy ko‘rsatkichlarning pasayishi dializ olmayotgan bemorlarga nisbatan ertaroq sodir bo‘lishi mumkin. Bu dializ olayotgan bemorlarda sarkopeniyaning og‘irlik darajasini baholash uchun tez-tez nazorat tekshirishlari o‘tkazish zarurligini ko‘rsatadi, chunki bunday yondoshish davolash strategiyalarini erta boshlash imkonini beradi.

Yuqorida bayon qilinganidek, mushak kuchi, massasi va jismoniy faolligining pastligi sarkopeniya belgilari sifatida tan olingan. SBK bilan og‘rigan bemorlarning deyarli yarmida mushak kuchi past bo‘lib, faqat har to‘rtinchisida uning massasi kamligi aniqlangan. Mushak kuchining pastligi uning massasining kamligiga nisbatan ko‘proq salbiy oqibatlar bilan bog‘liqligi qayd etilgan. Past mushak kuchining yuqori darajada tarqalishi SBK bilan og‘rigan bemorlar uchun muhim klinik ahamiyatga ega [27]. Darhaqiqat, EWGSOP 2 sarkopeniyaning asosiy xususiyati deb past mushak kuchi belgilangan va asosiy omil sifatida kam mushak massasining o‘rnini egallaydi [8]. Dializdagi va dializsiz guruhlarni taqqoslash natijalari shuni ko‘rsatdiki, birinchi guruh bemorlarda past mushak kuchi ko‘proq aniqlanadi, mushak massasi va jismoniy faollik ko‘rsatkichlari esa farq qilmaydi. Bu ma'lumotlar dializdagi bemorlarda kuzatilayotgan surunkali katabolik holat sarkopeniyaning asosiy belgisi bo‘lgan mushak kuchiga salbiy ta'sir ko‘rsatishini tasdiqlaydi.

Shu bilan bir qatorda Marvery P. Duarte va hammualliflarining natijalaridan farqli o‘laroq, adabiyotlarda jinsni sarkopeniya bilan bog‘liq xususiyatlarga, jumladan, qo‘l panjalarining past kuchining og‘irligiga ta'sir qilishi mumkinligi ta'kidlanadi va uremik holatdagi erkaklarda ishtahaning yo‘qolishi, yallig‘lanish va keyinchalik tayanch-harakat tizimi muvozanatining buzilishiga moyillik kuchayishi mumkinligi taxmin qilinadi [10, 12]. Geografik mintaqalar solishtirilib o‘rganilganda, Osiyo va undan tashqari mamlakatlar o‘rtasida sezilarli farqlar aniqlanmagan. Garchi ovqatlanish odatlari va jismoniy faollik xulq-atvori kabi turmush tarzi omillari sarkopeniyaning muhim bashoratchilari bo‘lsa va mamlakatlar o‘rtasida farq qilsa ham, yuqoridagi mualliflarning natijalari SBK bo‘lmagan insonlarda sarkopeniyaning tarqalishini o‘rgangan oldingi tadqiqotlarga mos keladi [26].

O‘tkazilgan adabiyotlar taxlili sarkopeniya skriningini SBK klinik nazoratiga joriy etish zarurligini ko‘rsatadi. Buning uchun Respublikamizdagi nefrologiya bo‘limlaridagi gemodializ va buyrak ko‘chirib o‘tkazilgan bemorlarda qimmatbaho asbob-uskunalardan foydalanmasdan jismoniy faoliyatlarni o‘lchash imkoniyati mavjudligini inobatga olib, ularni kundalik klinik amaliyotga keng joriy etish lozim. Shuningdek, sarokpeniyani aniqlashda foydalaniladigan umume'tirof etilgan so‘rovnomalardan foydalanish maqsadga muvofiq. Bundan tashqari, ushbu guruh bemorlarda sarkopeniyaga qarshi ta'sir ko‘rsatish imkoniyati bo‘lgan, jumladan, jismoniy mashqlar va yetarli kaloriya hamda oqsil iste'molini buyurish zarur.

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PERI- VA POSTMENOPAUZA DAVRIDAGI AYOLLARDA TOS A'ZOLARINING PROLAPSI VA JINSIY DISFUNKTSIYANI JARROHLIK YO'LI BILAN KORREKSIYA QILISHNING ZAMONAVIY YONDASHUVLARI (ADABIYOTLAR TAHLILI)

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СОВРЕМЕННЫЕ ПОДХОДЫ К ХИРУРГИЧЕСКОЙ КОРРЕКЦИИ ПРОЛАПСА ТАЗОВЫХ ОРГАНОВ И СЕКСУАЛЬНОЙ ДИСФУНКЦИИ У ЖЕНЩИН В ПЕРИ- И ПОСТМЕНОПАУЗАЛЬНЫЙ ПЕРИОД (ОБЗОР ЛИТЕРАТУРЫ)

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MODERN APPROACHES TO SURGICAL CORRECTION OF PELVIC ORGAN PROLAPSE AND SEXUAL DYSFUNCTION IN PERI- AND POSTMENOPAUSAL WOMEN (LITERATURE REVIEW)

Dolzarblik: Xar bir ayollarning uylagani , pre- va menopauza yoshidagi ayollar sog'lom bo'lishni, jismoniy va ma'naviy jihatdan yaxshi holatda turishi, chiroyli, seksual va go'zal ko'rinishda bo'lishni xoxlaydi. Ba'zan barcha ayollar ham klimakterik davrga xos bo'lgan holatlar — ya'ni, ayollar seksual disfunksiyasi (ASD), kin prolapsini va boshqa bir qator somatik kasalliklar haqida tulik ma'lumotga ega emas. Bugungi kunda statistik taxlillarga kura 2030 yilga kelib, xozirgi kunga nisbatan 80 yoshli ayollarda 4 baravarga oshadi. Bu esa, ayollar seksual disfunksiyasi, genital prolapsi, osteoporoz va menopauzaga bog'liq boshqa qator holatlarning ko'payishiga olib keladi. Perimenopauza va menopauza davriga kirgan ayolning seksual sog'ligi uning shaxsiy hayotida muhim o'rin tutadi, jamiyat, oila va atrofdagilarga bo'lgan munosabatiga turli jihatdan ta'sir ko'rsatadi. Menopauzadagi ayollarda jinsiy aloqalarda og'riq his qilishdan qo'rqish, ularni seksdan butunlay voz kechishga olib kelishi mumkin. Lekin ayollarning perimenopauza va menopauza davrida jinsiy faolligini davom ettirishi sog'liq va hayot sifatini saqlab qolishda juda muhim ahamiyatga ega. Jinsiy hayotdagi "yosh chegarasi" degan tushuncha yo'q – yillar o'tishi bilan ayol tanasining tashqi ko'rinishi o'zgarishi mumkin, ammo uning seksual qobiliyati emas.

Jinsiy hayot ayolning gullab-yashnagan davridagidek bo'lmasligi mumkin, lekin insonlar o'rtasidagi samimiy munosabatlar haqidagi misollar bugungi kunda yetarlicha ko'p – ularning aksariyati hayotning uzoq yillarida ham uyg'unlik va baxtni namoyon etmoqda. Tibbiyot amaliyotida kup mutaxassislar uchun ayollardagi seksual salomatlik yukolishlarning xususiyatlarini aniq va ravshan tushunish oson emas. Bu, avvalo, ayollarning intim shikoyatlar bilan shifokorga murojaat qilishdan iborat. Pre- va menopauza davrida ayolning seksual xolatini uning hayotida juda muhim jihat bo'lib, faqat jinsiy sohada emas, balki umuman hayot sifatini ham salbiy ta'sirga uchratadi. Ayollar ushbu

davrda ro‘y beradigan kasalliklarning zamonaviy klinik ko‘rinishlari, ularni davolash va tiklovchi reabilitasiya imkoniyatlari haqida xabardor bo‘lishi kerak fizioterapevtik va psixoseksual reabilitasiya usullari haqida ma'lumotga ega bo‘lishi, ko‘plab oilaviy intim hayotda yuzaga keladigan murakkab holatlarni oldini olishga yordam beradi [1, 2, 4, 14]. Ayollarda menopauzada yuzaga keladigan seksual disfunksiya bilan bog‘liq muammolarning aksar qismi hali ham yechimini topmagan.

Shu bilan birga, ushbu muammo bilan aynan kim shug‘ullanishi kerakligi ham aniq emas — urologlarmi, ginekologlarmi, psixopatologlar yoki seksopatologlarmi? Yoki, balki, bu sohada yangi avlod mutaxassislarini tayyorlash kerakmi? [4]. Bugungi kunda 50 yoshdan katta bo‘lgan ayollar orasida urogenital buzilishlar yoki seksual disfunksiya belgilariga duch kelmaganini uchratish juda qiyin. Premenopauza va menopauza davrida urogenital tizimdagi yoshga bog‘liq o‘zgarishlar yengil belgilanarli bo‘lsa-da, postmenopauza davri cho‘zilishi bilan bu o‘zgarishlarning nafakat uchrashi, balki og‘irligi ham ortib boradi. Ayollarning ko‘pchiligi genital atrofiya, aellarda seksual disfunksiya kabi muammolarni menopauza va qarishning tabiiy qismi deb hisoblab, ularni yashirishga harakat qilishadi [2, 4, 14, 18].

Pre- va menopauzada genital qarish va aellarda seksual disfunksiya atrofik hamda distrofik o‘zgarishlar bilan bog‘liq simptomlar majmuini tashkil etadi. Bu o‘zgarishlar estrogenlarga bog‘liq to‘qima va tuzilmalarda — siydik qopchasi, uretra, qin, yuz beradi. Bu simptomlar kompleksi menopauzadagi ko‘p ayollarda atrofik vaginit va sistouretrit holatlarining rivojlanishiga olib keladi. Agar menopauza 10 yildan ortiq davom etsa, urogenital buzilishlar, atrofik vaginit va ASD holatlari 73% gacha ortishi mumkin [2, 4, 14]. Estrogen garmoning kamligidan atrofik vaginit, sistouretrit va boshqa kindagi uzgarishlarni rivojlanishidagi roli yaqqol namoyon bo‘ladi. Menopauzada estrogen va boshqa gormonlar kamligigi tufayli fiziologik o‘zgarishlar — jinsiy faollik va ASDning kamayishi, dispareuniya (og‘riqli jinsiy aloqa), klimakterik surunkali siydik chiqarishdagi muammolar, jinsiy xohish va orgazmning yo‘qolishiga sabab bo‘ladi [10, 11, 12, 13, 14].

Tadqiqot maqsadi – pre- va menopauza davridagi ayollarda jinsiy a'zolar prolapsini zamonaviy jismoniy, fizioterapevtik, psixologik, gormonal va jarrohlik usullari orqali korreksiya qilish imkoniyatlarini ishlab chiqish va aniqlash.

Ayollardagi seksual disfunksiya (ASD) ko‘p hollarda turli urogenital buzilishlar, jumladan, giperaktiv siydik qopchasi, interstisial sistit, stress va imperativ siydik ushlab tuta olmaslik holatlari bilan bog‘liqdir. Interstisial sistit (IS) tashxisi qo‘yilgan bemor ayollarda jinsiy hayotni sezilarli darajada buzadigan asosiy simptomlardan biri — dispareuniya (ya'ni jinsiy aloqa vaqtidagi doimiy yoki takrorlanuvchi og‘riq). Ilmiy tadqiqotlar natijalariga ko‘ra, IS tashxisi qo‘yilgan ayollarning 80–90% ushbu og‘riqni boshdan kechirishadi, bu esa jinsiy faollikdan qo‘rqish tufayli uning oldini olishga olib keladi. Bunday holatda xoxishni pasayishi, jinsiy hayajon va orgazmga erishishda qiyinchiliklar ro‘y beradi, bu esa ayolning hayot sifatini jiddiy ravishda pasaytiradi [1, 2, 13, 14]. Seksual disfunksiya fonida shakllanadigan psixoseksual va shaxsiy buzilishlar ASD patogenezidagi asosiy zvenolardan biri sifatida qaraladi [13, 14, 19]. Klinik amaliyotda menopauzadagi ayollarda ichki jinsiy a'zolar prolapsi bilan bog‘liq holatlar tadqiq etilganda, 83,8% holatda ginekologik buzilishlar aniqlangan. Asosiy simptomlar — pollakiuriya (siydik chiqarishning kun davomida tez-tez bo‘lishi), nikturiya (tungi siydik chiqarish), sistalgiya (siydik yo‘llarida og‘riq), imperativ siydik chiqarish ehtiyoji, giperaktiv siydik qopchasi va interstisial sistit belgilari [4, 13, 14]. II–III darajadagi jinsiy a'zolar prolapsi aniqlangan ayollarning ikkidan uch qismidan ortig‘ida yuqori siydik yo‘llari urodinamikasida buzilishlar kuzatilgan, bu esa yuqorilab boruvchi infeksiyalar rivojlanishiga olib kelgan. Tekshirilgan ayollarning 75% da plakiuriya kuzatilgan bo‘lib, bu yallig‘lanish jarayonini tasdiqlaydi. Stress siydik ushlab tuta olmasligi bemorlarning uchdan bir qismidan ortig‘ida uchragan va bu holat tampon-proba kabi klinik usullar orqali tasdiqlangan. Shunday qilib, menopauzada stress siydik ushlab tuta olmasligi holati har uchinchi ayolda kuzatilgan [10,11]. Ko‘pgina mualliflar pollakiuriya, nikturiya, sistalgiya va ASD simptomlarini menopauza davridagi estrogen tanqisligi va u bilan bog‘liq atrofik o‘zgarishlar bilan izohlashadi. Bu o‘zgarishlar asosan genital qon tomir tizimida namoyon bo‘ladi [1,2,4,15].

Anatomik va funksional darajada isbotlanganki, proksimal uretra, Lieto uchburchagi, qin, distal uretra va parauretral bezlar embriologik, anatomik va funksional jihatdan yaqin bog‘langan. Endoskopik tekshiruvlarda uretra, siydik qopchasi va qin shilliq qavatining oqsargan, yupqalashgan, kapillyarlar bilan to‘yingan, yengil teginishda qon ketishiga moyil holati kuzatiladi. [1,2,10,11]. Klimakteriy davridagi estrogen tanqisligi to‘qimalarning biokimyoviy tarkibi va tuzilishiga salbiy ta'sir ko‘rsatadi. Estrogen darajasining bosqichma-bosqich pasayishi ichki jinsiy a'zolarning prolapsi, urogenital buzilishlar va ASDning to‘liq klinik manzarasi bilan namoyon bo‘lishiga sabab bo‘ladi. Garchi o‘rinli qo‘llanilgan zaminlashtiruvchi gormonal terapiya (ZGT) ayrim funksiyalarni tiklash imkoniyatiga ega bo‘lsa-da, uning samaradorligi vaqt o‘tishi bilan kamayadi. ZGTning kechiktirilgan qo‘llanilishi to‘qimalarda qaytarib bo‘lmas metabolik o‘zgarishlarga olib keladi, shu sababli uni o‘z vaqtida boshlash muhim hisoblanadi. Qator ayollarda siydik qopchasi to‘lish fazasida detruzorning irodasiz qisqarishi — giperaktiv detruzor funksiyasi rivojlanadi, bu esa siydikni o‘z-o‘zidan yoki turtki bilan chiqib ketishiga olib keladi (masalan, xaqirish, tez yurish, xarakat yoki pog‘onalardan chiqish paytida) [13]. Keyingi menopauza bosqichida og‘ir urologik buzilishlarda siydik chiqarish ustida nazorat deyarli yo‘qoladi. Tizza tagi mushaklarining bo‘shashishi hatto uxlash vaqtida yoki jinsiy aloqa kabi yengil jismoniy faoliyat paytida ham sodir bo‘ladi. Jinsiy a'zolar prolapsi, ASD, kognitiv va psixoseksual buzilishlar kabi ginekologik muammolarning yig‘indisi menopauzadagi ayollarning 78% da kuzatiladi [10,11]. Urogenital buzilishlar ko‘pincha ichki jinsiy a'zolarning turli darajada tushib ketishi bilan bog‘liq bo‘ladi va bemorning yoshi ortishi bilan bu holatlar soni ortib boradi [10,11,13,14].

Menopauzadagi ayollarning ⅔ qismida qinning old qism anatomiyasi buzilishi, siydik qopchasi bilan bog‘liq holatlar va 83% holatda siydik chiqarish tizimida funksional buzilishlar kuzatilgan. Agar menopauza 10 yildan ortiq davom etsa, urogenital buzilishlar va atrofik vaginit holatlari 73% gacha yetishi mumkin. vaginoplastika sistosele va qin old segmenti anatomiyasi buzilishlarida, xirurgik korreksiyaning zamonaviy usuli sifatida, menopauzadagi ayollarda ushbu buzilishlar rivojlanishining oldini olishda samarali ekanligi isbotlangan. Bizning klinik va reabilitasion tajribamizga ko‘ra, jinsiy a'zolar prolapsining boshlang‘ich bosqichidagi ayollarning 62% i zamonaviy jarrohlik, ginekologik massaj, jismoniy va gormonal reabilitasiya usullariga muhtoj. Bu esa urogenital buzilishlar va ASD rivojlanish xavfini 2,5 baravarga kamaytirishga hamda menopauzada hayot sifatini saqlab qolishga yordam beradi [10, 11].

Kam harakatlilik — o‘zini o‘zi cheklash, og‘riqdan qo‘rqish sababli ayollarning jismoniy faolligini pasaytiradi, bu esa uzoq muddatda passiv turmush tarziga, jismoniy mashqlardan tiyilishga olib keladi. Bunga qarshi ravishda jismoniy faol ayollar uroginekologik buzilishlar va ASD belgilariga kamroq duch kelishadi. Menopauzadagi gipodinamiya semirish, osteoporoz, oraliq mushaklarining sezuvchanligi pasayishi, ichki jinsiy a'zolar tushishi va seksual disfunksiya rivojlanishiga zamin yaratadi. Agar jismoniy holat yaxshi bo‘lsa va salomatlikka zid ko‘rsatmalar (yuqori qon bosimi, EKGda patologiya va h.k.) mavjud bo‘lmasa, menopauzadagi ayollarga jismoniy reabilitasiya dasturlarida faol ishtirok etish tavsiya etiladi.

Tonggi gigienik gimnastikani tura holda yoki to‘shakda yotgan holda ham bajarish mumkin, bunda barcha mushak guruhlari faoliyatini qamrab olish tavsiya etiladi. Jismoniy mashqlar yengil shaklda, ehtiyotkorlik va o‘zini sug‘urta qilish qoidalariga rioya qilgan holda amalga oshirilishi lozim. Mashqlar majmuasiga qo‘l va yelka kamari, bosh, bo‘yin, tan, oyoq, oyoq panjalari va barmoqlari mushaklari uchun kuchga mos jismoniy mashqlar kiritilishi zarur. Mashqlar albatta K. P. Buteyko usuli bo‘yicha nafas gimnastikasi (VPGD) [17] va samomassaj bilan birgalikda olib borilishi maqsadga muvofiq. So‘nggi yillarda keng tarqalgan va ommalashib borayotgan yo‘nalishlardan biri — bu tanseval fizioterapiya, ya'ni raqsli jismoniy terapiya hisoblanadi. Raqsli terapiya demokratik xususiyatga ega — raqsga tushish uchun maxsus tayyorgarlik yoki muayyan yosh shart emas. Bunda jins yoki yosh cheklovi yo‘q — har kim raqsli harakatlar orqali o‘zini erkin ifoda etishi mumkin. Raqsli terapiyada tana harakatlari ob'ekt sifatida emas, balki

jarayon sifatida qabul qilinadi. U orqali inson o‘z tanasi ustidan nazorat o‘rnatishni o‘rganadi — bu esa zamonaviy jamiyatdagi axloqiy qoidalar talabiga mos keladi. Raqs insonning qalbida his etilgan, ammo hayotda amalga oshirolmagan harakatlarni namoyon etish imkonini beradi. Musiqa qo‘shing va raqsga tushing — yolg‘iz, sevgan insoningiz bilan yoki farzandlaringiz bilan! Bu — yangilangan hayot sari tashlangan ilk qadamingiz bo‘lsin [10, 13].

Jismoniy xarakat, faol turmush tarzi, kurortlar rejimi va davolash jarayoni gormonal terapiyani jismoniy, fizioterapevtik davolash va reabilitasiya tadbirlari bilan muvaffaqiyatli uyg‘unlashtirish imkonini beradi. Bu jarayonda ginekolog, urolog, psixonevrolog, reabilitolog mutaxassislar hamda sanatoriy shifokori va o‘rta tibbiy xodimlarining ruhiy jihatdan qo‘llab-quvvatlovchi va yordam ko‘rsatuvchi munosabati muhim ahamiyat kasb etadi. Bunday yondashuv klimakterik sindrom bilan kechuvchi ayollarda uroginekologik buzilishlar va ayollar seksual disfunksiyasini samarali davolash va reabilitasiya qilishga ijobiy ta'sir ko‘rsatadi. Sanator-kurortda davolanish jarayonida muhitning o‘zgarishi, turmush tarzidagi yangiliklar, uy va oila muhitidagi ayrim salbiy omillardan vaqtincha xoli bo‘lish ayolga to‘liq ravishda davolash-tiklanish jarayoniga e'tibor qaratish va zamonaviy sog‘lomlashtirish usullarini o‘zlashtirishga yordam beradi [7, 10, 11, 12]

Xulosa: Pre- va postmenopauzal davrda ayollarda uchraydigan jinsiy a'zolar prolapsi, urogenital buzilishlar va seksual disfunksiya murakkab patogenetik mexanizmga ega bo‘lib, ularning rivojlanishi estrogen tanqisligi, trofik o‘zgarishlar va tana tuzilmasidagi yoshga bog‘liq atrofik-distrofik jarayonlar bilan chambarchas bog‘liq. Menopauza davri 10 yildan ortiq bo‘lgan ayollarda genital kasalliklarning og‘ir shakllari (atrofik vaginit, interstisial sistit, sistouretrit, dispareuniya va boshqalar) 73% holatda uchraydi. Urogenital sohadagi o‘zgarishlarni bartaraf etishda, jumladan, jinsiy a'zolar prolapsini zamonaviy jarrohlik yo‘li bilan to‘g‘rilash, fiziologik va psixoemosional holatni barqarorlashtirish, turmush tarzini isloh qilish, jismoniy faollikni oshirish, hamda sanator-kurort sharoitida reabilitasiyani kompleks ravishda olib borish katta ahamiyat kasb etadi. Keyingi tadqiqotlar ushbu muolajalarning uzoq muddatli natijalarini o‘rganishga qaratilgan bo‘lishi lozim.

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TUG'RUQ TRAVMASINING ZAMONAVIY JIHATLARI VA UNING OQIBATLARI: EPIZIOTOMIYA, VAGINAL DISBIOZ VA TOS BO'SHLIG'I YETISHMOVCHILIGI (ADABIYOTLAR TAHLILI)

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СОВРЕМЕННЫЕ АСПЕКТЫ РОДОВОГО ТРАВМАТИЗМА И ЕГО ПОСЛЕДСТВИЙ: ЭПИЗИОТОМИЯ, ДИСБИОЗ ВЛАГАЛИЩА И НЕСОСТОЯТЕЛЬНОСТЬ ТАЗОВОГО ДНА (ОБЗОР ЛИТЕРАТУРЫ)

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MODERN ASPECTS OF BIRTH TRAUMA AND ITS CONSEQUENCES: EPISIOTOMY, VAGINAL DYSBIOSIS AND PELVIC FLOOR FAILURE (LITERATURE REVIEW)

Kirish. Zamonaviy akusherlikda tos bo'shlig'iga bog'liq xavflar tufayli epiziotomiyadan muntazam foydalanishni qayta ko'rib chiqish tendentsiyasi mavjud. Tadqiqotlar shuni ko'rsatadiki, oraliq sohasi shikastlanishi, shu jumladan epiziotomiya va yirtilishlar tos diafragmasining yaxlitligini buzishi mumkin, bu esa tos churrasining shakllanishiga olib keladi.

Epiziotomiyalar va oraliq sohasi yirtilishlari bo'yicha statistik ma'lumotlar turli mamlakatlarda sezilarli darajada farq qiladi, bu esa tug'ruqni boshqarishga yondashuvlardagi farqlarni ko'rsatadi. Qo'shma Shtatlarda epiziotomiya 20% dan 73% gacha, uchinchi va to'rtinchi darajali yirtilishlar 4% dan 13% gacha uchraydi. Evropada bu ko'rsatkichlar ham farq qiladi: Shvetsiya va Buyuk Britaniyada tug'ruq jarohati mos ravishda 9,7% va 15% ni tashkil qiladi, Italiyada esa 58% ga yetadi. Lotin Amerikasi mamlakatlarida epiziotomiya 69,2-96,2% hollarda, Turkiyada esa birinchi tug'ruqlarda 93,3% hollarda yuzaga keladi. Afrikada epiziotomiya ko'rsatkichlari paritet bo'yicha o'zgaradi: janubiy Efiopiyada 68% va Zimbabveda o'rtacha 27%, birinchi tug'uvchi va qayta tug'uvchi ayollar o'rtasidagi farqlar bo'ladi. Nigeriyada epiziotomiya qo'llanilishi 21% dan 40,4% gacha, I-II darajali yorilishlar esa 18,2% ni tashkil qiladi, oraliq sohasi yarasining asoratlar bilan bitishi esa tug'ruqdagi har ikkinchi ayolda (52,1%) kuzatiladi.

Epiziotomiyaning keng qo'llanilishiga qaramay, tadqiqotlar shuni ko'rsatadiki, ba'zi hollarda u kafolatlangan bo'lishi mumkin. Misol uchun, Ankarcrona V. va boshqalarning tadqiqoti (2021) lateral yoki mediolateral epiziotomiya birinchi tug'uvchi ayollarda homilaning vakuum ekstraktsiyasi paytida III va IV darajali yorilish xavfini kamaytirishi mumkinligini aniqladi [1,5].

Ukrainada tug'ruq muddatining shikastlanishlar chastotasiga ta'siri ham qayd etilgan: homiladorlik muddati oshgan sari jarohatlar ko'payadi. Epiziotomiya bilan jarohatlanish 35,6% ni, choklarning infeksiyasi esa 17,7% ni tashkil qiladi.

Rossiyada oraliq sohasi yorilish holatlari 4,6% -11%, epiziotomiyalar - 16% -25% va umumiy travma - 21% -36% ni tashkil qiladi.

JSSTning joriy ko'rsatmalari epiziotomiya uchun ko'rsatmalarni cheklaydi, bu faqat asoratlangan vaginal tug'ruq va homilaning distress holatlarida tavsiya etiladi. Ushbu tavsiyalarning amalga oshirilishi Frantsiya va Kanadada epiziotomiyadan foydalanishning kamayishiga olib keldi [5].

Biroq, Franchi M. (2020) tadqiqotida ko'rsatilgandek, "cheklovchi" epiziotomiya birinchi va ikkinchi darajali oraliq sohasi yirtilishlarining ko'payishiga olib kelishi mumkin. Boshqa tomondan, norvegiyalik shifokorlar bu yondashuv bilan anal sfinkter shikastlanishining kamayishini qayd etdilar. Rossiyada ham oraliq sohasi jarohatlarning kamayishi kuzatildi. Rossiyalik mualliflarning ma'lumotlari 2012 yilda 21% dan 2016 yilda 6,1% gacha bo'lgan oraliq sohasi shikastlanishining kamayganligini ko'rsatadi. Zamonaviy nuqtai nazar, tos a'zolarining yetishmovchiligini sindromli tabiati, namoyon bo'lish va kechishining o'zgaruvchan davrlari, shuningdek, yuqori darajadagi fenotipik geterogenlik bilan multifaktorial holat deb hisoblanadi. Ushbu geterogenlik genetik omillar va atrof-muhit ta'sirining murakkab o'zaro

ta'siridan kelib chiqadi, bu ayollarning hayot sifatini sezilarli darajada yomonlashtiradi hamda jarrohlik yo'li bilan tuzatishni talab qiladi [3, 4, 10,14]. Tos bo'shlig'i mushaklarining yetishmovchiligi (TBMY) surunkali va progressiv holat bo'lib, ichki jinsiy a'zolarning tushishi, siydik tutolmaslik, defekatsiya buzilishi va jinsiy disfunksiya bilan tavsiflanadi, bu bemorlarning hayot sifatini sezilarli darajada pasaytiradi [6, 9, 11, 17].

Jahon statistikasi shuni ko'rsatadiki, ayollarning 2,9% dan 53% gacha tos bo'shlig'i disfunktsiyasining turli ko'rinishlari haqida xabar berishadi, ularning 47% gacha mehnatga layoqatli yoshdagi ayollar. Tos a'zolarining disfunktsiyasi 30 yoshgacha bo'lgan ayollarning 10 foizida, 30 yoshdan 45 yoshgacha bo'lgan ayollarning 40 foizida va 50 yoshdan oshgan ayollarning yarmida uchraydi, ularning har beshdan biri jarrohlik yo'li bilan davolashni talab qiladi. TBMY ning yuqori tarqalishiga qaramay, ushbu holatning patogenetik mexanizmlari yetarlicha o'rganilmagan [1, 5, 7, 16].

Tos bo'shlig'i yetishmovchiligining rivojlanishi uchun epigenetik xavf omillari orasida vaginal tug'ruq asosiy rol o'ynaydi. Har bir yosh guruhida tos a'zolarining tushishi (TAT) tarqalishi tug'gan ayollarda tug'maganlarga nisbatan yuqoriroqdir [2, 8, 18-20]. Ko'pgina tadqiqotchilar jinsiy a'zolarning tushishi puboservikal va rektovaginal fastsiyaning shikastlanishi yoki biriktiruvchi to'qimalarning ishdan chiqishi natijasida yuzaga keladi, deb hisoblashadi [12, 13, 15].

So'nggi yillarda tug'ruq travmasining chastotasi va og'irligini yetarlicha baholamaslik jiddiy tashvishlarni keltirib chiqardi. Handa V.L. tomonidan olib borilgan tadqiqotlarga ko'ra (2020) vaginal tug'ruqning taxminan uchdan bir qismi tos bo'shlig'i mushaklarining (ko'taruvchi mushaklarining) shikastlanishi bilan birga keladi [8]. Tug'ruqning ikkinchi bosqichida tos bo'shlig'ining mushaklari, nervlari va fastsiyasi shikastlanishi, shu jumladan cho'zish, siqilish va ishemiya sodir bo'ladi, bu esa keyinchalik jinsiy a'zolarning bo'shlig'ining ochilishi va oraliq sohasining mushak tonusining pasayishi kabi oqibatlarga olib kelishi mumkin [16, 17]. Avstraliyalik tadqiqotchilarning ta'kidlashicha, vaginal tug'ruqdan keyin tos bo'shlig'i shikastlanishining tarqalishi ilgari o'ylanganidan sezilarli darajada yuqori. Bundan tashqari, akusherlik sabablariga ko'ra anal sfinkterining shikastlanishi ham kamaymoqda. Tadqiqotda kogortaga kiritilgan birinchi tug'uvchi ayollarning yarmidan kamrog'i (33-40%) travmatik oqibatlarsiz asoratlanmagan vaginal tug'ruqga ega bo'lgan [4].

Zamonaviy dunyoda ginekologik kasalliklarning tarqalishi jamiyatni tashvishga solmoqda, bu Journal of Women's Health Care jurnalidagi nashrlarga ko'ra, hozirgi vaqtda aholining 22 foizini tashkil qiladi. Shu bilan birga, uning tuzilishi har uchinchi bemorda (28%) aniqlanadigan tos a'zolarining tushishi (13%), hayz davrining buzilishining muhim qismini o'z ichiga oladi, ammo shubhasiz yetakchi genital yo'l infeksiyalari - 38%. Ko'pgina mikroorganizmlarning vaginal biotsenozning shakllanishiga ta'siri zamonaviy adabiyotlarda doimiy ravishda muhokama qilinadi. 2012-yilda inson organizmidagi barcha mikroblarni tavsiflashni maqsad qilgan 5 yillik Inson Mikrobioma loyihasi yakunlandi. Genetik tahlil natijalariga ko‘ra, inson organizmida 10 000 dan ortiq turli xil mikroblar mavjudligi aniqlandi. Tadqiqotlar vaginal biotopda bakterial jamoalarning 5 ta asosiy sinfini aniqladi; Ulardan 4 tasida laktobakteriyalar (L. iners, L. crispatus, L. gasseri yoki L. jensenii), birida obligat anaeroblar ustunlik qiladi. Har bir sinfning sifat va miqdoriy tarkibi qisqa vaqt ichida o'zgarishi yoki uzoq vaqt davomida nisbatan barqaror bo'lib qolishi mumkin. Zamonaviy klinik mikrobiologiyaning yutuqlari normal mikrofloraning inson salomatligi, shu jumladan reproduktiv salomatlik uchun ahamiyati haqida yangi tasavvurni ochib berdi [11, 17]. Oddiy va g'ayritabiiy vaginal mikrobiota - bu genlar, etnik kelib chiqish, atrof-muhit va xulq-atvor omillari ta'sirida bo'lgan 200 dan ortiq bakterial turlardan iborat murakkab ekotizimlar [1, 9, 15]. Aksariyat ayollarning vaginal mikroflorasi turli xil laktobakteriya shtammlarining 90-95% ni tashkil qiladi [1, 7, 11, 19]. Glikogenni qayta ishlash orqali laktobakteriyalar qinning kislotaliligini aniqlaydigan sut kislotasini sintez qiladi. Optimal vaginal pH yangi va vaqtinchalik patogenlarning kirib kelishiga qarshi to'siq rolini o'ynaydi [5]. Biroq, hozirgi vaqtda ba'zi sog'lom ayollarda vaginal mikrobiomada fakultativ anaeroblarning keng doirasi hukmronlik qilishi aniqlangan. Bu holat infektsiya xavfi ortishi hamda reproduktiv va akusherlik bilan bog'liq salbiy natijalar bilan bog'liq. Lactobacillusning turli turlari va shtammlari infeksiyadan himoyalanishning o'zgaruvchan darajalarini ta'minlaydi. Laktobakteriyalar epiteliy hujayralari yuzasiga yopishib, vaginal muhitda faol ko'payadi, organik kislotalar to'planishi bilan glikogenni fermentatsiya qiladi, vodorod peroksid, lizozimni sintez qiladi va mahalliy immunitetni rag'batlantiradi [10]. Vaginal mikrobiota mudofaa tizimini antibakterial moddalar, sitokinlar, defensinlar bilan qo'llab-quvvatlaydi, bu ham homiladorlik va tug'ruq paytida muhim rol o'ynaydi [11, 14]. Shunday qilib, laktobakteriyalar vaginal mikroekotizimning o'ziga xos bo'lmagan himoya darajasini nafaqat kolonizatsiyaga chidamliligini yaratish, vodorod peroksidni ishlab chiqarish va qinda kislotali muhitni saqlash, balki patogen va shartli patogen mikrofloralar almashinuvining keng doiradagi ingibitorlarini ishlab chiqarish, shuningdek mahalliy immunitet tizimini rag'batlantirish orqali ifodalanadi.

Vaginal disbioz ikki holatda tug'ruq travmasi bilan bog'liq: homilador ayolda uning o'zgarishi, ayniqsa uchinchi trimestrda, akusherlik travmasi uchun yuqori xavf omillari hisoblanadi [6, 8, 23]. Boshqa tomondan, tug'ruq travmasi natijasida oraliq va dahliz halqasidagi anatomik o'zgarishlar genital yoriqning bo'shlig'iga va qinning tabiiy himoya mexanizmlarining buzilishiga olib keladi, bu yopiq jinsiy y%o'lni o'z ichiga oladi, bu qinga yuqumli agentlarning kirib borishi uchun mexanik to'siqni va yetarli pH darajasini ta'minlaydi [7].

Yopiq genital yoriq tashqi muhit va ichaklardan patogenlar uchun to'siqlardan birini tashkil etadi [4, 9]. Checheneva M.A. (2020) ma'lumotlariga ko'ra, qin biotsenozning buzilishi vaginal muhitning pH darajasining o'zgarishi bilan birga keladi, bu esa o'z navbatida to'qimalarning elastik xususiyatlarini o'zgartiradi. Qin tozalik darajasi o'zgarganda, yumshoq tug'ruq kanalining shikastlanish xavfi ortadi.

Shunday qilib, uzluksiz doira hosil bo'ladi: homilador ayolda qin biotsenozning buzilishi tos bo'shlig'ining shikastlanishi uchun qo'zg'atuvchi omil bo'lib xizmat qiladi, bu esa genital yoriqning bo'shlig'iga olib keladi. Bu, o'z navbatida, vaginal disbiozni saqlaydi va takroriy tug'ruq paytida tos bo'shlig'ining shikastlanish xavfini oshiradi. Boshqacha qilib aytganda, oraliq sohasi travma bilan asoratlangan birinchi tug'ruqdan so'ng, vaginal biotsenozning o'zgarishi fonida, tos bo'shlig'i mushaklari yetishmovchiligi ehtimoli ortadi, bu vaqt o'tishi bilan tos a'zolari tushishining rivojlanishiga yordam beradi [4, 11, 13, 22, 25].

Biroq, barcha tadqiqotchilar bu nuqtai nazarni qo'llab-quvvatlamaydilar. Letouzey (2015) tadqiqotida vaginal tug'ruqda 728 ayolni o'z ichiga olgan tadqiqotda 1-4 darajali oraliq sohasi yirtilishlarning tarqalishi 35,8% ni tashkil etdi (95% CI = [32,2; 39,6]). Bakterial vaginoz (BV) mavjudligi bir o'zgaruvchan tahlilda (CI = 1,43; 95% CI = [0,79, 2,60]; p = 0,235) yoki ko'p o'lchovli tahlilda (to'g'rilangan koeffitsient = 1,65; 95%CI = [0,81; 3,36]; p = 0,167) oraliq sohasi jarohatlanishi bilan bog'liq emas. Frantsuz tadqiqotchilari oraliq sohasi jarohatlanishlari uchun eng muhim xavf omili operativ vaginal tug'ruq degan xulosaga kelishdi.

Tug'ruq paytida oraliq sohasi jarohatlanishi va keyingi tos bo'shlig'i yetishmovchiligi, jinsiy a'zolarning tushishi va ular bilan bog'liq kasalliklar o'rtasidagi bog'liqlik masalasi munozarali bo'lib qolmoqda [11, 18, 22]. Hozirgi vaqtda tos a'zolarining tushishi (ayol generativ organlarining tushishi) sindromli tabiatga ega, namoyon bo'lish va kechishning turli davrlari, shuningdek, irsiy omillar va atrof-muhit ta'sirining o'zaro ta'siri natijasida yuzaga keladigan yuqori fenotipik geterogenlikka ega bo'lgan multifaktorial kasallik hisoblanadi. Bu holat ayollarning hayot sifatini sezilarli darajada pasaytiradi va ko'pincha jarrohlik yo'li bilan davolashni talab qiladi [14, 17].

Xulosa: Zamonaviy akusherlik tug'ruq travmasi, vaginal biotsenozning buzilishi va tos bo'shlig'ining yetishmovchiligi bilan bog'liq bir qator murakkab muammolarga duch keladi. Ginekologik kasalliklar, jumladan, tos a'zolarining tushishi, hayz davrining buzilishi va jinsiy yo'llarning infeksiyalari yuqoriligicha qolmoqda, bu esa chuqurroq o'rganishni, profilaktika va davolashga yangi yondashuvlarni joriy etishni talab qiladi.

Tug'ruq travmasi, shu jumladan epiziotomiya va oraliq sohasi shikastlanishi tos bo'shlig'i disfunktsiyasining rivojlanishi uchun muhim

xavf omilidir, bu ko'plab tadqiqotlar ma'lumotlari bilan tasdiqlangan. Biroq, epiziotomiyani qo'llash bo'yicha yondashuvlar munozarali bo'lib qolmoqda: bir tomondan, uning cheklangan qo'llanilishi og'ir jarohatlar xavfini kamaytirishi mumkin, boshqa tomondan, birinchi va ikkinchi darajali yorilish ehtimolini oshirishi mumkin. Shuni hisobga olish kerakki, oraliq sohasi shikastlanishi va genital yoriqning keyingi ochilishi vaginal biotsenozning buzilishiga yordam beradi, bu esa takroriy tug'ruq shikastlanishi xavfini kuchaytiradigan uzluksiz doirani yaratadi.

Ayolning reproduktiv salomatligini saqlashda vaginal mikrobiotaning rolini ortiqcha baholab bo'lmaydi. Laktobakteriyalar qin biotsenozning asosiy komponentlari sifatida infeksiyalardan himoya qiladi va optimal pH darajasini saqlab turadi, bu ayniqsa homiladorlik va tug'ruq paytida muhimdir. Mikrobiota buzilishlari tug'ruq travmasining ham sababi, ham oqibati bo'lishi mumkin, bu homilador va tug'ruqdan keyingi ayollarni parvarish qilishda kompleks yondashuv zarurligini ta'kidlaydi.

Ko'p faktorli holat bo'lgan tos bo'shlig'i yetishmovchiligi patogenetik mexanizmlarni yanada o'rganishni va oldini olish hamda davolashning samarali usullarini ishlab chiqishni talab qiladi. Mehnatga layoqatli yoshdagi ayollar orasida ushbu holatning keng tarqalganligini hisobga olib, epiziotomiyani cheklash, tug'ruqni olib borish texnikasini takomillashtirish va qin biotsenozini tiklash bo'yicha zamonaviy tavsiyalarni amalga oshirish muhimdir.

Shunday qilib, tug'ruq travmasi va uning oqibatlarini kamaytirish uchun quyidagilar zarur: 1. Epiziotomiyani cheklash bo'yicha JSST tavsiyalariga qat'iy rioya qilish.

2. Xavf omillarini hisobga olgan holda tug'ruqni boshqarishga yondashuvni individuallashtirish.

3. Homilador ayollarda qin biotsenoz buzilishlarining oldini olish va davolash.

4. Tos bo'shlig'i yetishmovchiligi rivojlanishining oldini olish uchun tug'ruqdan keyin ayollarni reabilitatsiya qilish dasturlarini ishlab chiqish va amalga oshirish.

Faqat kompleks yondashuv, jumladan, profilaktika choralari va zamonaviy davolash usullari ayollarning hayot sifatini yaxshilaydi hamda tug'ruq travmasi va tos a'zolarining disfunksiyasi bilan bog'liq asoratlarni kamaytiradi.

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BIRINCHI TUG`UVCHI AYOLLARDA PREEKLAMPSIYANI BASHORAT QILISHNING VA ERTA TASHXISLASHNING IMKONIYATLARINI BAHOLASH (ADABIYOTLAR TAHLILI)

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ОЦЕНКА ВОЗМОЖНОСТИ ПРОГНОЗИРОВАНИЯ И РАННЕЙ ДИАГНОСТИКИ ПРЕЭКЛАМПСИИ У ПЕРВОРОДЯЩИХ ЖЕНЩИН (ОБЗОР ЛИТЕРАТУРЫ)

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ASSESMENT OF THE POSSIBILITY OF PREDICTING AND EARLY DIAGNOSIS OF PREECLAMPSIA IN PRIMIPAROUS WOMEN (LITERATURE REVIEW)

Preeklampsiya homiladorlikning ikkinchi yarmining og'ir asorati bo`lib, bu proteinuriya va boshqa organlarga (ko'pincha jigar va buyraklarga) zarar yetkazish belgilari bilan arterial gipertenziya bilan namoyon bo'ladi. Preeklampsiya ko'pincha birinchi tug`uvchi ayollarda, homilador ayolning yoshi 20 yoshgacha va 35 yoshdan oshganda, past ijtimoiy - iqtisodiy holat, ko'p homiladorlik, poligidramnioz, semirish, arterial gipertenziya, shuningdek negroid irqi vakillarida uchraydi. Homiladorlik paytidagi patologiyalar tarkibida preeklampsiya sindromi birinchi o'rinlarda turadi, bu esa ertachi va ishonarli tashxis qo`yuvchi mezonlari, samarali oldini olish va ijobiy terapiyalash, davolash chora-tadbirlari yo'qligi bilan izohlanadi [2]. Jahon sog'liqni saqlash tashkilotining olingan ma'lumotlariga qaraganda, butun jahon bo'ylab homiladorlarning chamalab olganda o`n bir foizi preeklampsiya, eklampsiya, homiladorlik gipertenziyasi va surunkali gipertenziyalarni qamrab olgan qon bosimi ko`tarilishi bilan bog`liq bo`lgan kasalliklardan aziyat chekmoqda. Homilasi bor ayollarda qon bosimining oshishi homiladorlikning judayam jiddiy va salbiy asoratlarining sababi bo'lib, mayiblik va hattoki ulardan birining o'limiga olib kelishi mumkin [17].

Preeklampsiyaning rivojlanishi platsenta yetishmovchiligi, ko`p qon ketish, homila rivojlanishining kechikish sindromi, homilaning antenatal o'limi va boshqalar kabi homiladorlik asoratlari xavfini

oshiradi [8]. Keyinchalik preeklampsiya bilan og'rigan onalardan tug'ilgan bolalarda gipertoniya va semirish, ortiqcha vazn bo`lishi xavfi mavjud [14]. Preeklampsiyaning erta va kech boshlanishi, takroriy va takrorlanmaydigan shakllar, og'ir va o'rtacha kursli shakllar, homila o'sishining kechikishi va kechikishisiz, proteinuriyasi bor bo`lgan va proteinuriyasi bor bo'lmagan, o`ta darajada baland qon bosimi bilan faol ravishda bahs-munozara qilinmoqda [14]. Yigirmanchi asrning saksoninchi yillarida Blackwell va boshqalar tomonidan 24-32 haftada namoyon bo'ladigan "ertachi, kechki" preeklampsiya kabi tushunchalar o`rtaga tashlangandir. Yangi zamonaviy tasniflashga ko'ra, PE ning erta (34 haftagacha) va kech (34 haftadan keyin) shakllari ajratiladi [6]. Preeklamsiya sistolik qon bosimining 140 mm HG dan yuqori doimiy ko'tarilishi bilan tavsiflanadi yoki 90 mm HG dan yuqori diastolik, proteinuriya 0,3 g/l dan yuqori.

Yengil preeklampsiya:

* Qon bosimining 140/90 mmHg dan oshishi 6 soatlik interval bilan ikki marta o'lchanganda.
* Proteinuriya kunlik siydikda 0,3 g/l dan ortiq.

Og'ir preeklampsiya:

* Qon bosimining 160/110 mm HG dan oshishi 6 soatlik interval bilan ikki marta o'lchanganda
* Proteinuriya - kunlik siydikda 2 g dan ortiq protein
* Plazma kreatinini kontsentratsiyasining 1,2 mg/dl dan oshishi
* Trombotsitopeniya 10 × 104 / mm3 dan kam
* Oliguriya kuniga 500 ml dan kam
* umumiy bosh miya ta`sirlanish simptomlari yoki ko'rishning buzilishi
* Jigar fermentlarining ko'payishi.
* Mikrosirkulyatsiya buzilishining belgilari (epigastral og'riq, ko'z oldida "pashshalar" miltillashi)
* Retinaning gemorragik yoki ekssudativ o'zgarishi yoki optik diskning shishishi
* O'pka shishi.

Preeklampsiya ko`p etiologiyali va ko'p tizimli sindrom bo'lib, ushbu sindromning yuzaga kelishi ko'plab omillar va mezonlarga, shu jumladan genetik omillarning mavjudligiga, oldingi somatik va jismoniy, fiziologik patologiyaga, atrof-muhitning ijtimoiy, iqtisodiy omillarining ta'siriga va boshqa omillarga asoslangan. [8]. Kurochka tomonidan o'tkazilgan tadqiqot va islohotlarda ayollarning 58,6 foizlarining kasallik anamnezlarida preeklampsiya borligi isbotlandi. Preeklampsiya bilan og'riganlar va kasallanganlarning oltmish foizi surunkali buyraklar kasalligi, ellik bir foizi yurak-qon tomir tizimi patologiyasi, 38%i endokrin sistemasi patologiyasi va 24% metabolik sindromga ega [7]. Ko'p markazli tadqiqotlar ma'lumotlari bizga preeklampsiya rivojlanishining xavf omillarini aniqlashga imkon bermoqda edi: bu albatta birinchi homiladorlik, ko'p homiladorlik, og'ir oilaviy tarix, surunkali arterial gipertenziya, qandli diabet, surunkali buyrak va yurak kasalliklari, yordamchi reproduktiv texnologiyalardan foydalanish, ikkita homiladorligining oralig'i 10 yil va undan ko'p va uzoq bo`lishi, birinchi tug`uvchi va qayta tug`uvchi ayollar yoshining 35 yoshdan yuqori bo`lishi, preeklampsiyaning oilaviy tarixi, antifosfolipid sindromi. Semirib ketish hozirda preeklampsiya uchun tan olingan xavf omilidir [12]. Erta preeklampsiya uchun tana massasi indeksi ortishi xarakterli emas [4]. Keyinchalik preeklampsiyani rivojlantirgan ayollarda sistolik qon bosimi va o`rtacha arterial bosim ko'rsatkichlarining yuqori bo'lganligi aniqlanyapdi, bu birinchi va ikkinchi trimestrda past xavfli ayollarda preeklampsiya uchun yuqori prognostik qiymatga ega. Birinchi trimestr o`rtacha arterial bosimga onaning vazni, bo'yi, yoshi, irqiy kelib chiqishi, chekish yoki shunga o`xshagan zararli odatlari borligi, surunkali arterial gipertenziya, preeklampsiyaning oilaviy tarixi, preeklampsiya tarixi va oldingi homiladorlik kechgan xususiyatlari ta'sir qiladi. D. Gallo va boshqalar (2014 –yil) o`rtacha arterial bosimni (11 - 13 haftada) va kattroq muddatlarda o`rtacha arterial bosimning (20 - 24 xaftada) skriningini o'tkazdi, bu erta preeklampsiya uchun mos ravishda 74,3% va 84,3% aniqlash darajasini ko'rsatdi [32]. Preeklampsiya patogenezi to'liq o`rganilmagan, ammo so'nggi o'n yilliklarda bu borada sezilarli yutuqlarga erishildi. Platsenta har doim preeklampsiya etiologiyasining markaziy bo'g'ini bo'lib kelgan, chunki platsentani olib tashlash simptomlarning regressiyasiga olib keladi. Preeklampsiyada platsentaning morfologik tekshiruvi ko'plab platsenta infarktlari va arteriolalarning sklerotik torayishini aniqlaydi [4]. Noto'g'ri trofoblastik invaziya va u bilan bog'liq uteroplasental ishemiya haqidagi gipoteza preeklampsiyaga olib kelishi mumkin, hayvonlar va inson tadqiqotlari bilan tasdiqlangan. Implantatsiyaning dastlabki bosqichlarida (homiladorlikning birinchi trimestrining boshi) platsenta sitotrofoblastlari maqsadli ravishda endometriyga, so'ngra spiral arteriyalar devorlariga (homiladorlikning birinchi trimestrining oxiri) ko'chib, ularning elastomuskulyar tarkibiy qismlarini lizingga oladi; bu vazopressor ta'siriga sezgir bo'lmagan, qon tomir qarshiligi past bo'lgan keng arterial estuarlarni hosil qiladi [5]. Sitotrofoblast ta'sirida qon tomir devorini o'zgartirishning bu jarayoni spiral arteriyalarni qayta qurish deb ataladi. Endotelial disfunktsiya endotelial relaksatsiya qiluvchi omillarining endotelial ishlab chiqarishining buzilishida namoyon bo'ladi, ular orasida azot oksidi, endotelin I, prostatsiklin, to'qima plazminogen faollashtiruvchisi bor [20]. Ushbu moddalar kontsentratsiyasining pasayishi qon tomirlarining reaktivligini buzilishiga olib keladi - umumiy vazokonstriksiya, tuzlar va suyuqlikni ushlab turish bilan glomerulyar filtratsiya tezligining buzilishi, tomir ichi hajmining pasayishi, markaziy asab tizimining qo'zg'aluvchanligining oshishi, tarqalgan tomir ichi ivishi [30]. Preeklampsiyaning paydo bo'lishida ya`ni patogenezi jarayonida immunologik omillar va jarayonlar ham muhim rol o'ynar ekan. Homiladorlikning dastlabki haftalarida, erta muddatlarida fetoplatsentar tizim homila – yo`ldosh tizimi tarkibida tabiiy killer (o`ldiruvchi) hujayralar va makrofaglarning miqdori ko'payadi. Ushbu immun hujayralari platsenta – yo`ldsohning shakllanishini quyidagilar orqali ta'minlaydi: trofoblastik hujayralarni jalb qilish, bachadon spiral arterialarini qayta qurish va angiogenez ya`ni qon-tomir hosil qilish jarayonlarining faollashishi. Ayol organizmi makrofaglari turli sitokinlarni, xemokinlarni, angiogen omillar va proteazlarni ishlab chiqarish orqali trofoblast invaziyasini va to'qimalarni qayta qurish darajasini tartibga solib turadi. Haddan tashqari immunitet reaktsiyasi va yallig'lanishlar ham preeklampsiyaning barcha bosqichlari rivojlanishining muhim omili bo`ladi. Fetoplatsentar – homila – yo`ldosh tizimda amalga oshiriladigan sezilarli aseptik yallig'lanish ham - endotelial hujayralarda ham mahalliy, ham tizimli darajada oksidlovchi stressni keltirib chiqarish xususiyatiga ega bo`lgan ko'plab vazofaol va yallig'lanishga qarshi omillarning, mediatorlarning chiqarilishi bilan birga keladi deb hisonlanadi.

Shunday qilib, preeklampsiyaning tugunli patogenetik bo'g'inlari quyidagicha ifodalanishi mumkin: spiral arteriyalarda sitotrofoblastning yetarli darajada invaziyasi bo`lmaganligi → ularning qayta tuzilishining buzilishi → vazopressor refrakterligining yo'qolishi → platsenta ishemiyasi → antiangiogen omillarning sintezi → endoteliyning shikastlanishi → umumiy vazokonstriksiya. Ammo shuncha izlanish, tadqiqot va ularning olingan natijalariga qaramay ushbu sindromning, ya`ni homiladorlarning xavfli patologiyasining hozirgi kungacha to`liq, mukammal ishlab chiqilgan yagona nazariyasi yoki bo`lmasa mexanizmi mavjud emas. Gipotezalar ko`p, ammo nazariyalar ham shunga mos ravishda xilma xil va har biri o`zicha to`g`ri bo`lgan bo`lsada, ko`p savollar hali haligacha javobsiz qolmoqda.

1996 yilda R. B. Ness va boshqalar preeklampsiyani ikki toifaga bo'lish taklif qilindi: platsentar va ona tomonidan, ularga mos ravishda erta (homiladorlikning 34-haftasidan kam) va kech boshlanadigan (homiladorlikning 34-haftasidan ortiq) [21]. Ushbu ikkita kichik tip turli xil etiologiya va fenotiplarga ega deb taxmin qilingan. Platsental yoki preeklampsiyaning dastlabki bosqichida etiologiyasi gipoksik sharoitda g'ayritabiiy platsentatsiya bo'lib, sFlt-1 darajasi yuqori, PlGF qiymatlari past va sflt-1/PlGF nisbati ona preeklampsiyasiga nisbatan oshadi. Shuningdek, bachadondagi qon oqimini dopplerometrik tekshirish keyinchalik erta emas, balki kech preeklampsiya rivojlanadigan bemorlarni aniqlashda yuqori aniqlikka ega ekanligi ko'rsatilgan. Ushbu ma'lumotlar spiral arteriyalarning fiziologik transformatsiyasining buzilishi bilan bog'liq bo'lgan bachadon arteriyalarida qon oqimining g'ayritabiiy darajada yuqori qarshiligini tasdiqlaydi. Ona tomonidan paydo bo`lgan preeklampsiyasida yoki preeklampsiyaning rivojlangan

bosqichida muammo normal platsenta va endotelial disfunktsiyadan aziyat chekadigan ona omillari o'rtasidagi o'zaro ta'siri tufayli yuzaga keladi va bu ularni mikrovaskulyar shikastlanishga moyil qiladi. Ushbu tasniflar prognostik ahamiyatga ega bo'lib ko'rinadi, chunki platsenta yoki erta boshlang'ich preeklampsiya ona va homila asoratlari xavfini sezilarli darajada oshiradi [22]. Shuningdek, ularda platsenta patologiyalarining ko`p turlari uchrab turadi, ayniqsa homiladorlikning 28 va 32-haftalari orasida yuqori tarqalishini ko'rsatadi. Shuning uchun platsentar yoki erta, dastlabki preeklampsiyada homila o'sishining cheklanishi bu salbiy ona tomonidan va neonatal natijalar bilan bog'liq [26]. Shu bilan birga, onaning preeklampsiya yoki kech boshlanishi onaning endoteliy disfunktsiyasidan kelib chiqqan platsentadagi oksidlovchi stressga dekompensatsiyalangan javob bo'lib ko'rinadi. Onaning tizimli yallig'lanish reaktsiyasining bir jihati bo'lgan endotelial disfunktsiya umumiy vazokonstriksiyaga olib kelishi va bir nechta organlarga, shu jumladan yurak, buyrak va miyaga qon oqimining pasayishiga olib kelishi mumkin [28]. Ammo, patologiyaning sababi platsentada ko'rinmaganligi sababli, homila bilan bog'liq holatlarning pastligi va perinatal natijalar yanada qulayroq [31]. Preeklampsiyaning ushbu kichik turlari o'rtasidagi aniq patofiziologik farqlarga qaramay, ularni ajratish ko'pincha qiyin, chunki ikkita kichik turni bir vaqtning o'zida kuzatish mumkin, masalan, anormal platsentatsiya qayd etilgan qon tomir kasalliklari bilan ayollarning kechikib tug`ish yoshi. Shunday qilib, turlarni ajratish vaziyatni tushunish va bashorat qilish uchun foydali bo'lishi mumkin bo'lsa-da, preeklampsiya bilan og'rigan bemorlarning ko'pchiligida ikkala patologiyaning elementlari mavjud[18].

Hozirgi vaqtda preeklampsiyaning ko'plab taxminiy belgilari mavjud, ular orasida ba'zi gormonlar - adrenokortikotropik gormon, qalqonsimon gormonlar, ba'zi sitokinlar, kaltsiy ioni, D vitamini, esreaktiv oqsil, hujayraning yopishuvchi molekulalari, tromboksan, l - gomoarginin, gaptoglobin, qon tomir endotelial o'sish omili, antifosfolipid antitanalari, homilaning erkin DNK va RNK si, plazma lipidlari, fibronektin, endotelin va boshqa ko'plab biokimyoviy parametrlar [25]. Preeklampsiya belgilarini izlash yo'nalishlaridan biri immunologik ko'rsatkichlar, shu jumladan tartibga solish funktsiyasiga ega bo'lgan va shu bilan embriogenezda ishtirok etadigan tabiiy autoantanalardir [4]. NICE (Klinik mukammallik va sog`lik milliy instituti) bo'yicha ona omillari bo'yicha skrining samaradorligi 32 xaftadan kichik muddatda preeklampsiya uchun 41%, 37 xaftadan katta muddatlarda preeklampsiya uchun 39% va 37 xaftadan kichik muddatlarda preeklampsiya holatlarida 34% ni tashkil qiladi va qilmoqda. Amerika Akusherlik va Ginekologiya Kolleji tomonidan tavsiya etilgan skriningdan foydalanganda preeklampsiya 32 haftagacha 94% ni, 37 haftagacha 90% ni tashkil qilib va 37 haftadan ko'proq vaqt davomida 89% da aniqlanadi. Ammo noto'g'ri ijobiy natijalar oltmish ikki yu to`rt foizni tashkil qiladi [28].

Preeklampsiyani faqat oldingi akusherlik tarixini tahlil qilish ma'lumotlariga asoslanib ogohlantirib bashorat qilish mumkin emas, ko'plab ilmiy ishlar, tadqiqotlarning maqsadlari va vazifalari biomarkerlar yordamida preeklampsiya rivojlanishi uchun yuqori xavfli ayollarni aniqlashga qaratilgan. Ba'zi bir mualliflarning fikriga qaraganda, birinchi trimestr skriningida mavjud bo'lgan parametrlardan foydalanish ayollarning katta qismidagi patologiyalarni, so'ngra preeklampsiyani aniqlashga imkon beradi [13]. Boshqalar esa bu fikrlarni qo'llab - quvvatlashmaydi. Onaning ahvoli va fiziologik xususiyatlarini baholash erta preeklampsiyani bashorat qilishda eng samarali va ijobiy usullardan biri hisoblanadi va biomarkerlar bilan birgalikda modelning bashorat qilish qobiliyati juda sezilarli darajada oshadi. Biroq, ba'zi ona plazma markerlari eng yuqori bashoratli qiymatni ko'rsatadi. Ushbu guruhning aksariyat markerlari sitotrofoblast tomonidan sintez qilingan mahsulotlardir, ularning kontsentratsiyasidagi o'zgarishlar yo'ldoshning shakllanish jarayonlarining buzilishini aks ettirishi mumkin. Bunday ona plazmasi belgilari PAPP-A homiladorlik bilan bog'liq plazma oqsili va PIGFplatsenta o'sish omili [16].

Insulinga o'xshash o'sish omilining mitogenligiga kuchaytiruvchi ta'sir ko'rsatadigan, molekulyar og'irligi 820 kda bo'lgan, sintsitiotrofoblast tomonidan ishlab chiqarilgan bo'lgan metalloproteinaza bu PAPP-A hisoblanadi. PAPP-A ning diagnostik ahamiyati platsentaning rivojlanishida insulinga o'xshash o'sish omilining muhim roli bilan bog'liq. PAPP-A ning past darajalari preeklampsiyaning yuqori darajasi bilan bog'liq, ammo preeklampsiya allaqachon rivojlangan bo'lsa, sarum PAPP-a darajasi ko'tariladi [13]. Tadqiqotlarda Poon va Shalina keyinchalik preeklampsiya rivojlangan homilador ayollarda 11-14 xaftada PAPP-A darajasining pasayishi aniqlandi [19]. Meloniy tomonidan o`tkazilgan tadqiqotda homiladorlikning 11-13 xaftalari orasida PAPP-A o'lchovini o'z ichiga olgan 973 ta holat, shuningdek, PAPP-A ning past darajalari homiladorlikning qon bosimi ko`tarilishi gipertenziv asoratlari rivojlanish xavfi ortishi mumkin bo'lgan belgi bo'lishi mumkinligini ko'rsatdi [24]. Roonet o`zining tadqiqotlarida doppler tadqiqotlari va xavf omillari mavjudligi bilan birgalikda 83,3% hollarda erta preeklampsiya rivojlanishini bashorat qilish imkonini beradi, ammo yolg'on ta'sir qilish darajasi taxminan 5% ni tashkil qiladi.

Qon tomir - endotelial o'sish omillari guruhidan PIGF glikoprotein, uning molekulyar og'irligi 30-46 kda. Qon tomir - endotelial o'sish omillari sitotrofoblast hujayralari tomonidan sintezlanadi, angiogen funktsiyalarga ega. Preeklampsiyaning kelib chiqishi PIGF sintezining pasayishi bilan bog'liq bo'lib, ba'zi ilmiy izlanish va tadqiqotlar preeklampsiyaning klinik debyut bosqichida onaning qon zardobida PIGF kontsentratsiyasi miqdori kamayganligini isbotladi. Bundan tashqari, PIGF darajasining pasayishi preeklampsiyaning klinik debyutidan oldin sodir bo'ladi va homiladorlikning I va II trimestrlari uchun ishonchli belgidir [8]. PIGF darajasining pasayishi platsenta gipoksiyasini, endotelial disfunktsiyani ko'rsatadi va homiladorlikning 10-13 xaftaligida aniqlanadi. PE rivojlanishining skrining testi sifatida homiladorlikning 11-13,6 xaftaligida ajratilgan PIGF ta'rifining bashoratli qiymati 53-65% ni tashkil qiladi [9].

Molekulyar og'irligi 90-110 kda bo'lgan glikolizlangan oqsil hisoblangan eriydigan FMSga o'xshash tirozin kinaza - 1 (sFlt-1) dir, qon tomir o'sish omili retseptorlari (VEGF), shuningdek platsenta o'sish omili (PIGF) ning eruvchan shaklini ifodalaydi. sFlt - 1 homiladorlikning fiziologik va patologik davrida aniqlanadi, ammo u aynan preeklampsiya sindromi paydo bo'lishidan oldin ham sezilarli darajalarda oshadi [29]. Homiladorlikning fiziologik kechish davrida sFlT-1 darajasi miqdori homiladorlik davri va onaning yoshi bilan ortadi. Shunga ko'ra onaning ortiqcha vazni bo`lishi va vaznining ortishi bilan ushbu markerning kontsentratsiyasini kamayadi.

SEng - eruvchan endoglin angiogenezda ishtirok etadi, vazokonstriksiyani rag'batlantiradi va preeklampsiyaya patofiziologiyasida rol o'ynaydi [4]. Endoglin azot oskidining endotelial sinetetazasi bilan o'zaro ta'sir qilish orqali qon tomir tonusini tartibga solish bilan tavsiflanadi. Endoglin, shuningdek, TGF-I31 va TGF-B3 o'sish omillari uchun retseptordir [11]. Ba'zi tadqiqotlarga ko'ra va izlanishlarga qaraganda, preeklampsiyaning erta rivojlanishida eruvchan endoglin darajasi homiladorlikning 17-20 haftaligida ikki – uch baravar ko'payishi mumkin [15]. Homiladorlikning o`ttizinchi haftasidan keyin, kech preeklampsiya bo'lgan ayollarda endoglin kontsentratsiyasi oshadi [23]. Eruvchan endoglin bilan birga sflt-1 ni aniqlash bachadon arteriyalarida qon oqimining yomonlashuvi belgilari bo'lgan ayollarda, shuningdek, erta preeklampsiya tashxisida prognostik ahamiyatga ega usul (sezuvchanlik 100%, o'ziga xoslik 93,3%) [33]. Alohida-alohida, sanab o'tilgan omillarning hech qaysi biri preeklampsiyani bashorat qilishda yetarli ahamiyatga ega emasligi aytib o`tilgan va ko'rsatilgan, ammo PIGF/sEng nisbati albatta sezilarli prognostik ahamiyatga ega hisoblanib, sezgirligi 100%, o'ziga xosligi 98-99% [27].

Erta preeklmapsiya rivojlanishining platsenta genezisini hisobga olgan holda, kindik va bachadon arteriyalarida qon oqimining buzilishi erta preeklmapsiya boshlanishidan oldin kech preeklmapsiyaga qaraganda ancha tez-tez sodir bo'lishi ko'rsatilgan. Renin – angiotensin - aldosteron tizimining roli homiladorlik paytidagi yuzaga keladigan yurak - qon tomir va buyrak o'zgarishlarini tartibga solishda katta va ahamiyatli hisoblanadi. Bir nechta tadqiqotlar renin – angiotensin-aldosteron tizimining preeklampsiya patologiyasi va fiziologiyasidagi roliga bag'ishlangan. Renin – angiotensin - aldosteron tizimining oqsillarini kodlovchi genlar preeklampsiya paydo bo'lishida ishtirok etadigan ehtimoliy nomzodlar sifatida qaraladi. Angiotenzinga aylantiruvchi ferment (AAF), 1-toifa va 2-toifa angiotensin II

retseptorlari va angiotenzinogen (AGT) va ularning preeklampsiyadagi roli keng qamrovli o'rganilgan. Yaqinda o'tkazilgan tahlillar shuni ko'rsatdiki, T AGT m235t allel genlari preeklampsiyaning yuzaga kelishi va rivojlanishini xavfini 1,62 marotabaga oshiradi va angiotensinga aylantiruvchi AAF i/D fermentining polimorfizmida kasallik xavfining shunga o'xshash o'sishi aniqlangan. AGTda polimorfizm haqida xabarlar mavjud, bu esa og'ir preeklampsiya bilan bog'liq bo'lishi mumkin bo'lgan renin parchalanish joyida leytsinni fenilalanin bilan almashtirishga olib keladi [35].

Addutsin - bu natriy bir plus ionlarining tashilishi, aktin va spektrin, kalmodulinning bog'lanishi bilan bog'liq bo'lgan membrananing oqsili hisoblanadi. ADD1 geni addutsinning alfa bo'linmasini kodlaydi. Ba'zi islohotlar add1 genining arterial gipertenziya rivojlanishidagi muhim rolini ko'rsatadi, ammo ma'lum bir genlarni va ularning ketma ketligini uning preeklampsiya yuzaga kelishiga qo'shadigan hissasini qo'shimcha tekshirish va tajriba o`tkazish kerak [36].

Mavjud vodorod sulfidini hosil qiluvchi (H2S) tizimi preeklampsiya patogenezida ham ishtirok etadi. H2S – bu is gaziga o'xshash vazodilatator, sitoprotektiv va angiogen xususiyatlarga ega gaz. H2S uchta ferment tomonidan hosil bo'ladi: sistationin-g-liaza, sistationin-b-sintaza va 3-merkaptopiruvat-sulfurtransferaza quyidagi substratlardan foydalangan holda: sistationin, homosistein, sistein va merkaptopirauvat. H2S darajasi nafaqat preeklampsiyada pasaygan, balki ular sFlt-1 va sEng darajalarini modulyatsiya qilgan. Bundan tashqari, ushbu mexanizm VEGFga bog'liq bo'lishi mumkin. SFlt - 1 ni haddan tashqari ifodalovchi adenovirus bilan davolangan kalamushlar donor natriy gidrosulfid eritmasiga duchor bo'lganda, ular sFlt-1 darajasining pasayishini va qon zardobida VEGF kontsentratsiyasining oshishini qayd etdilar. Buyraklardagi VEGF genining ifodasi ham oshdi, bu H2S ning proangiogen ta'siri VEGF vositachiligida ekanligini ko'rsatadi. Klinik jihatdan kalamushlarda proteinuriya, gipertoniya va glomerulyar shikastlanish kamaygan. Bundan farqli o'laroq, preeklampsiya bilan og'rigan bemorlarda H2S prekursor molekulalarining past darajalari aniqlanadi [34]. Ba'zi mualliflarning o`ylashiga qaraganda, bachadon arteriyasida ya`ni arteria uterinada qon oqimining dopplerometrik tahlili ertachi preeklampsiya boshlanishini va homila o'sishining yetarli emasligini sezilarli darajada yuqori qiymat bilan bashorat qilishga imkon beradi [7]. Guedes-Martins va boshqa hammualliflar 2014-yilda o`tkazgan izlanishiga muvofiq gipertenziv kasalliklarga nisbatan past xavfli homilador ayollar guruhida dopplerografiya va dopplerometriyada katta klinik ahamiyatga ega emasligini ko'rsatdi, ammo xatar mavjud bo'lgan hollarda, preeklampsiyaning ro`yobga chiqishi va homila o'sishi va rivojlamishining kechikishini bashorat qilishda bachadon arteriyalarining qon oqimini baholash muhim ahamiyatga ega, ayniqsa ularning ertachi rivojlanadigan shakllarida. Zamonaviy tadqiqotlarga ko'ra, bachadon arteriyalarining pulsatsiyalanuvchi indeksi [10] dopplerometriyadagi eng indikativ qiymatdir. Shunday qilib, preeklampsiyani erta bashorat qilib aniqlash uchun yuqoridagi markerlarni aniqlash homiladorlikning birinchi trimestridayoq mumkin va asoratlarni rivojlanishining oldini olishning keyingi taktikasi va choralari masalasini hal qilishga imkon beradi va juda katta ma'lumot beradi. Homiladorlikning o`n uch – o`n bir haftaligida preeklampsiya rivojlanishini bashorat qilish, shuningdek o`n olti haftalik homiladorlik vaqtidan boshlab to 34 haftagacha yetkazib berish davriga qadar atsetilsalitsilli kislotasining past dozalarini qabul qilish shaklida profilaktika choralariga bo'lgan ehtiyojni aniqlashga imkon beradi [22].

So`nggi trimestrda preeklampsiyaga kech tashxis qo`yishda yuqorida sanab o'tilgan belgilarni aniqlash aniq tashxis qo'yish va yetkazib berish vaqtini aniqlash uchun foydali bo'lishi mumkin, bu esa ona va bolaning jiddiy patologiyasi xavf-xatarini kamaytiradi. Preeklampsiyaning erta boshlanishi deyarli har doim homila o'sishining yuqori chastotasi fonida tug'ilishning erta induksiyasi bilan bog'liq, ya`ni homila kattargan va vazni ortgan sari preeklampsiya kelib chiqqan ayollarda tug`ish ertaroq sodir bo`lish xavfi oshishi, shuning uchun perinatal natijalar va oqibatlar, preeklampsiyaning kech shaklidan farqli o'laroq, bolalarning tana vazni, yangi tug'ilgan chaqaloqlarning umumiy ahvoli og'irligi va perinatal kasallanish va o'limning tarqalishi bilan, halokatli yakunlanishi bilan farq qiladi. Erta preeklampsiyani bashorat qilish uchun klinik ko'rinishlarga (gipertenziya va proteinuriya) asoslangan klassik yondashuv yetarli emas deb hisoblaydilar [3]. Preeklampsiya uchun ma'lum miqdordagi klinik xavf omillari ma'lum, ammo hali umuman tug`magan ayollarda xavf omillarining kombinatsiyasi asosan yetarlicha o'rganilmagan. Sog'lom tug`magan ayollarda preeklampsiya xavfini aniq tabaqalashtirishga imkon beradigan usulning o`zi yo'q [1]. Shuning uchun birinchi marta homilador va ilk tug`uvchi ayollarda erta preeklampsiya uchun klinik va anamnestik, oilaviy tarix ma'lumotlarini va biokimyoviy belgilarni qo'shimcha o'rganish kerak bo`ladi. Ona yoki homilaning tanqidiy-kritikli va asoratli holatlarining rivojlanishi bilan qiyinlashgan erta preeklampsiyani bashorat qilish yuqori xavfli bemorlarda oldini olish profilaktika chora tadbirlari, erta tashxis qo'yish va perinatal natijalarni yaxshilashga imkon beradi va bu katta yutuq hisoblanadi.

Hozirgi zamonada preeklampsiyani bashorat qilish uchun ko'plab mumkin bo'lgan genetika belgilar va mezonlari mavjud, ammo ba'zi genlarni ayniqsa perspektin genlarini va ularning preeklampsiya rivojlanishiga qo'shadigan hissasini qo'shimcha ravishda tekshirib ko`rish kerak. Genetik belgilarni isloh qilish pregravidar homiladorlik oldi tayyorgarlik bosqichida ham mumkin, bu preeklampsiyani erta rivojlanishini oldindan aytib berishga va bashoratni yaxshilashga, asoratlar xavfini kamaytirishga va ertaroq dori - darmonlar bilan korrektsiyalash zarurligini aniqlashga yordam beradi. Shunday qilib xulosa o`rnida shularni aytish mumkinki, zamonaviy tibbiyotda shuncha shart sharoit yaratilgan bo`lsada, ushbu homiladorlarda uchraydigan patologiyani to`liq va aniq tashxis qo`yish uchun, ta`kidlash kerakki erta tashxis qo`yish uchun yuqorida ko`rsatilgan usullar anchagina yordam beradi va samarali hisoblanadi, ammo bularning hammasi ham bizga yuz foiz natijalarni bermasligi mumkin. Ushbu usullardan foydalangan va foydalanayotgan rivojlangan va rivojlanib kelayotgan davlatlarda yuqoridagi patologiyaning nojo`ya ta`sirlari va yomon oqibatlari anchagina kamaygan. Aynan shu natijalarni biz tibbiyotimizning erishib kelayotgan yutuqlaridan biri deb hisoblasak bo`ladi va arziydi. Shu jumladan, o`zimizning mamlakatimizda ham ushbu usullardan ba`zilari yo`lga qo`yilgan va foydalanib kelinmoqda.

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TUG'RUQ YO'LLARINING YUMSHOQ TO'QIMALARIDA SHIKASTLANISHLAR BO'LGAN AYOLLARNI OLIB BORISH TAKTIKASINI TAKOMILLASHTIRISH (ADABIYOTLAR TAHLILI)

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СОВЕРШЕНСТВОВАНИЕ ТАКТИКИ ВЕДЕНИЯ РОДИЛЬНИЦ С ТРАВМАМИ МЯГКИХ ТКАНЕЙ РОДОВЫХ ПУТЕЙ (ОБЗОР ЛИТЕРАТУРЫ)

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IMPROVING TACTICS FOR MANAGING POSTPARTUM WOMEN WITH SOFT TISSUE INJURIES OF THE BIRTH CANAL (LITERATURE REVIEW)

Ayollar oralig‘i chanoqning romb shaklidagi pastki chiqishi bo‘lib, oldindan qov birlashmasi va orqadan dum suyagi bilan chegaralangan. Oraliq jarohati tug‘ruq paytida ayol jinsiy a’zolarining har qanday turdagi shikastlanishini o‘z ichiga oladi, bu o‘z-o‘zidan yoki yatrogen (epiziotomiya yoki instrumental tug‘ruq paytida) paydo bo‘lishi mumkin. Oraliqning oldingi shikastlanishi qinning oldingi devori, uretra, klitor va jinsiy lablarga ta’sir qilishi mumkin. Oraliqning orqa shikastlanishi qinning orqa devori, oraliq mushagi, oraliq tanasi, tashqi va ichki anal sfinkterlari va anal kanaliga ta’sir qilishi mumkin. Tug‘ruq paytida oraliq yirtilishlarining aksariyati qinning orqa devori bo‘ylab, anusga tarqaladi, ba’zi tadqiqotlarga ko‘ra, bir xil miqdordagi ayollarda bitta yoki ko‘p sonli yirtilishlar kuzatilgan (51% ga qarshi 49%). Oraliq yirtilishlari ko‘pincha oraliqning oldingi sohasiga qaraganda orqa sohasida sodir bo‘lgan (80% ga qarshi 58%).

77,5%, 20,0% va 2,5% ayollarda birinchi, ikkinchi va uchinchi darajali yirtilishlar mos ravishda oraliqning orqa sohasida sodir bo‘lgan, ularning yarmidan ko‘pi to‘g‘ridan to‘g‘ri yirtilishlar (62,5%), taxminan uchdan birida U-simon yirtilishlar (35,0%) va ozchiligida yulduzsimon yirtilishlar (2,5%) bo‘lgan. Tug‘ruq paytida oraliq shishi ikkinchi darajali uzilishlarning mustaqil prediktori bo‘lib qoldi. Shunday qilib, normal tug‘ruqdan keyin oraliq yirtilishlari, ehtimol, birinchi darajali, to‘g‘ridan to‘g‘ri bo‘lgan va asosan oraliqning orqa sohasida sodir bo‘lgan. Uzilishlarning darajasi, uzunligi va chuqurligi joylashuviga qarab o‘zgarib turgan [20].

Aksariyat yirtilishlar uzoq muddatli asoratlarsiz tuzalsa-da, og‘ir holatlar uzoq davom etadigan og‘riq, jinsiy disfunksiya va uyatchanlikka olib kelishi mumkin. Ko‘pgina uzilishlar birinchi yoki ikkinchi darajali uzilishlar bo‘lib, odatda choklar qo‘yishni talab qiladi. Biroq, jiddiy yirtilishlar, ayniqsa anal sfinkterning akusherlik

shikastlanishi, tos tubi disfunksiyasi va siydik tuta olmaslik kabi jiddiy asoratlarga olib kelishi mumkin [2].

Tug‘ruqdan keyingi chanoq tubi kasalliklari ayollar uchun umr bo‘yi og‘ir oqibatlarga olib keladi va har yili 300 000 dan ortiq ayollarni operatsiya qilishni talab qiladi. Bu har yili tabiiy yo‘l bilan tug‘adigan 3 million ayolning taxminan 10 foizini tashkil qiladi. Tabiiy tug‘ruq yo‘llari orqali tug‘ilish prolaps, tug‘ruq bilan chambarchas bog‘liq bo‘lgan chanoq tubining buzilishi uchun eng katta o‘zgartiriladigan xavf omili bo‘lib, zo‘riqish paytida siydik tuta olmaslikning muhim omili hisoblanadi [34].

Oraliq jarohati - bu tug‘ruq paytida jinsiy a’zolarning har qanday shikastlanishi bo‘lib, jarrohlik kesish (episiotomiya) natijasida o‘z-o‘zidan yoki qasddan sodir bo‘ladi. Oraliq yirtilishi - akusherlik va ginekologiyada homilaning oldinda yotgan qismining qinga va qo‘shni anatomik tuzilmalarga haddan tashqari bosimi natijasida yuzaga keladigan travmatik shikastlanish. Patologiya barcha tug‘gan ayollarning 12-16% da kuzatiladi, bu tug‘ruq paytida eng keng tarqalgan asoratdir. Birinchi marta tug‘ayotgan ayollarda oraliq yirtilish xavfi takroriy tug‘ayotgan ayollarga qaraganda 1,5-3 baravar yuqori. Bundan tashqari, xavf guruhiga anamnezida oraliqning travmatik shikastlanishi, bachadon va qinning takroriy kasalliklari bo‘lgan ayollar kiradi. Ushbu patologiyaning dolzarbligi, shuningdek, septik kasalliklar, qon ketishi, anal sfinkter tonusining yo‘qolishi, qin va bachadonning tushishi va tushishi, qin va to‘g‘ri ichak o‘rtasida oqma paydo bo‘lishi, yiringlash va choklarning yetishmovchiligi kabi ko‘plab potentsial asoratlar bilan bog‘liq.

Tabiiy tug‘ruq yo‘llari orqali tug‘ayotgan ayollarning 85% dan ortig‘i u yoki bu darajadagi oraliq yirtilishidan aziyat chekadi [28], shu bilan birga, barcha vaginal tug‘ruqlarning 0,6-11% uchinchi yoki to‘rtinchi darajali yirtilish bilan tugaydi. Yaxshiyamki, oraliq yirtilishi chastotasi keyingi tug‘ruqlarda kamayadi: tug‘magan ayollarda 90,4% dan tabiiy tug‘ruq yo‘llari orqali tug‘ayotgan takroriy tug‘uvchi ayollarda 68,8% gacha.

Tug‘ruq jarohatlari bir nechta omillar tufayli yuzaga kelishi mumkin, masalan, ayolning ortiqcha vazni yoki semizligi, tug‘ilganda bolaning katta vazni, vakuum ekstraktorlari kabi akusherlik asboblaridan foydalanish, tug‘ruq paytida akusher tomonidan bachadon tubiga bosim yoki litotomiya pozitsiyalarida tug‘ilish. Biroq, ushbu omillarning shikastlanishlarning paydo bo‘lishiga ta’siri darajasi bo‘yicha bir qator noaniqliklar va kelishmovchiliklar mavjud [34]. Ushbu tadqiqotlarning barchasi oraliq jarohatlari va turli xil yirtilishlarga qaratilgan, ammo Socialstyrelsen, Komplikationer efter fo‘rlossning hisobotida vaginal tug‘ruq va kesarcha kesishning turli oqibatlari o‘rganilgan. Bir nechta tadqiqotlar natijalarini umumlashtirib, ushbu hisobot shuni ko‘rsatadiki, kesarcha kesish oraliq jarohatlari xavfini kamaytiradi, ammo boshqa mumkin bo‘lgan asoratlar ko‘proq uchraydi va jiddiyroqdir.

So‘nggi yillardagi adabiyot ma’lumotlariga ko‘ra, RUDN tibbiyot instituti va GBUZning "N.I. Pirogov nomidagi 1-son GKB" prospektiv randomizatsiyalangan tadqiqotiga ko‘ra [14], oraliqning akusherlik shikastlanishining eng muhim prediktorlari quyidagi mikroorganizmlar spektri bilan qin mikrobiotsenozining buzilishi (nospetsifik vaginit, bakterial vaginoz) hisoblanadi: Candida albicans; Streptococcus agalactiae; Escherichia coli; Staphylococcus aureus; Staphylococcus haemolyticus. Chanoq tubi to‘qimalarining keyingi morfologik o‘zgarishlari, o‘z navbatida, mikroorganizmlarning sifat va miqdoriy ifloslanishi; qin muhitining pH o‘zgarishi, oraliqning past tonusi bilan bog‘liq [13]. Shuningdek, bu ro‘yxatga anamnezda, shu jumladan akusherlik qisqichlarini qo‘yish operatsiyasidan keyin jarohatlanish natijasida oraliqdagi chandiqli nuqsonlarning mavjudligi ham kiradi [6]. Bunday klinik holat qayta shikastlanish xavfini 2-3 barobar oshiradi [11]. Oraliqning og‘ir shikastlanish xavfi omillariga (shu jumladan 3-4-darajali yirtilishlarga) quyidagilar kiradi: instrumental tug‘ruq (vakuum ekstraktor, akusherlik qisqichlari va boshqalarni qo‘llash), tug‘ilgandagi homila vazni 4000 g dan ortiq, orqa-ensa bilan kelishdagi tug‘ruq va o‘rta chiziq episiotomiyasi [29]. Oraliq jarohati jihatidan tug‘ruqning ikkinchi davri qisqa yoki uzoq davom etishi (30 daqiqadan kam va 60 daqiqadan ortiq davom etishi) alohida ahamiyatga ega, chunki unda to‘lg‘oqlar har 3 daqiqada zo‘riqish xususiyatiga ega bo‘ladi, bunda bemorlar oraliqda o‘tkir yoki uzoq davom etadigan og‘riqni qayd etadilar. Biroq, tug‘ruq paytida akusherlik yordamini to‘g‘ri olib borish, oraliq to‘qimalari holatini yanada diqqat bilan baholash, muntazam qisqartirishdan voz kechish va tug‘ruqning ikkinchi davrini oqilona boshqarish episiotomiya va oraliq jarohatlari chastotasini kamaytirish imkonini berishi aniqlangan [15].

Bundan tashqari, tug‘ayotgan ayolning shifokor nazorati ostida o‘z zo‘riqishlarini boshqarishi uzilish xavfini sezilarli darajada kamaytiradigan shartdir. Shvetsiyada o‘tkazilgan randomizatsiyalanmagan tadqiqot shuni ko‘rsatdiki, o‘z-o‘zidan itarilish, tug‘ilish paytida dumg‘aza-yonbosh bo‘g‘imlarida egilish holati va boshdan tanaga ikki bosqichli tug‘ruqdan iborat ko‘p qirrali aralashuv 2% darajadagi uzilishlarni sezilarli darajada kamaytirgan [25].

Oraliqning akusherlik jarohati chastotasining pasaymasligi uzoq muddatli oqibatlar muammosini keltirib chiqaradi - chanoq tubi yetishmovchiligi(ChTY), siydik va anal inkontinensiyasi, jinsiy disfunksiya - va chanoq a’zolari prolapsi prodromi sifatida namoyon bo‘ladi [33]. Ushbu holatlar bilan bog‘liq holda chanoq tubi yetishmovchiligining asosiy etiologik omili - oraliqning akusherlik shikastlanishini o‘rganish, ularning sonini kamaytirish yo‘llarini izlash, shu jumladan prognozlash usullari yordamida ayollar populyatsiyasini sog‘lomlashtirish uchun zaxira hisoblanadi.

Tibbiyot davriy nashrlarida sanab o‘tilgan akusherlik perineal jarohatlarining sabablarini o‘rganish eng aniq xavf omillari bilan chegaralanadi: homiladorlik muddati, tug‘ruqning ikkinchi davri davomiyligi, homila o‘lchamlari [19]. Tug‘ruq paytida oraliq yirtilishining asossiz kam o‘rganilgan xavf omili hali ham qin biotsenozining buzilishi hisoblanadi. Ma’lumki, homiladorlik davrida qin disbiozining yuqori chastotasi bir qator omillarga bog‘liq: gormonal muvozanatning o‘zgarishi, qin epitelial hujayralarida glikogenning to‘planishi, progesteronning yuqori darajasining immunosupressiv ta’siri va qon zardobida globulinlar bilan bog‘liq immunosupressiya omilining mavjudligi [31]. Qin suyuqligi pH va qin biotsenozi buzilishi oraliq to‘qimalarining pH va elastik xususiyatlarining o‘zgarishiga olib kelishi mumkin. Qin mikroekologiyasi yomonlashganda, tug‘ruq paytida shikastlanish xavfi ortadi [16].

Keyinchalik, tug‘ruq paytida perineal shikastlanishlari bo‘lgan bemorlarda biz chanoq tubi yetishmovchiligi ko‘rinishlaridan birini - jinsiy yoriqning ochilishini qayd etamiz. Qin introitusining ochiqligi, o‘z navbatida, qin biotsenozining buzilishiga va ushbu patologik holatning saqlanib qolishiga, ya’ni takroriy tug‘ruq paytidayoq oraliq jarohatining rivojlanishiga olib keladi. Shunday qilib, yopiq doira hosil bo‘ladi: qin disbiozi - chanoq tubi jarohati - (jinsiy yoriqning yorilishi) - qin disbiozi - takroriy tug‘ruqda chanoq tubi jarohati. Bundan kelib chiqadiki, oraliq jarohati bilan asoratlangan birinchi tug‘ruqdan so‘ng, qin biotsenozi o‘zgarishi fonida, najasni ushlab tura olmaslik xavfi ortadi [32].Tabiiy tug‘ruq yo‘llari orqali tug‘ruqdan keyin najasni ushlab tura olmaslik xavfi omillari onaning 35 yoshdan oshgan yoshi, tug‘ilgandagi chaqaloq vazni 4000 grammdan ortiq va instrumental tug‘ruq hisoblanadi. Kesarcha kesish orqali tug‘ruqdan keyin najas tuta olmaslikning yagona xavf omili onaning 35 yoshdan oshganligi edi [43].

Bunga qarama-qarshi xulosalar C. Colla va hammualliflar tomonidan chiqarilgan. (2018): ular o‘z tadqiqotlarida tug‘ruq usuli oraliqning akusherlik jarohati qisqa muddatli tug‘ruqdan keyingi oqibatlarining shakllanishiga ta’sir qilmasligini isbotladilar [22].

Tabiiy va yatrogen tug‘ruq travmatizmi sezilarli asoratlar rivojlanish ehtimoli deyarli bir xil [7]. Oraliqning shikastlanishi multifokal bo‘lib, nafaqat yaqin, balki uzoq muddatli tug‘ruqdan keyingi davrda ham ayollarning jismoniy, ruhiy va ijtimoiy salomatligiga ta’sir qiladi. Sog‘liqning psixologik va ijtimoiy buzilishlari ko‘krak suti bilan oziqlantirish muammolari, sherigi bilan munosabatlar va jinsiy munosabatlarda aks etadi [29].

Buyuk Britaniyadagi tadqiqotlarda tug‘ruqdan keyingi davrdagi ayollarda og‘riq va asoratlar bo‘yicha so‘rov o‘tkazilgan. So‘ralganlarning taxminan 23-42% tug‘ruqdan keyingi dastlabki 10-12 kun ichida og‘riq va noqulaylikni boshdan kechiradi va ayollarning 7-10% tug‘ruqdan keyingi 3-18 oy davomida og‘riqni boshdan kechirishda davom etadi. Shuningdek, ishtirokchilarning 23 foizi tug‘ruqdan 3 oy o‘tgach yuzaki dispareuniya, 3-10 foizi najas tuta

olmaslik, 24 foizgacha ayol siyish bilan bog‘liq muammolarni qayd etadi [42].

Infeksiya uchun to‘g‘ridan to‘g‘ri kirish darvozasi oraliqning patofiziologik yirtilishi va kesilishi bo‘lib, 2021-yilgi Milliy akusherlik qo‘llanmasi ma’lumotlariga ko‘ra, tug‘ruq paytida oraliq jarohatlarini davolash sifatidan qat’i nazar, tug‘ruqdan keyingi 2-4 oy ichida 19,3% ayollarda infeksion asoratlar rivojlanishi mumkin. Bu ko‘pincha choklarning yetishmovchiligiga, yiringlashga va keyinchalik ikkilamchi cho‘zilish bilan bitishga olib keladi [1]. Shu bilan birga, homilador ayollarning yuqori infektsiya darajasi yuqumli jarayonlarning rivojlanishiga yordam beradi. Vaginaning yallig‘lanish jarayonlari: vaginit, vulvovaginit, kolpit va boshqalar tug‘ruq yo‘llari to‘qimalarining shikastlanish xavfini sezilarli darajada oshiradi. Hatto tug‘ruq yo‘llari yumshoq to‘qimalarining ahamiyatsiz yorilishlari ham chanoq tubi mushaklarining funksional yetishmovchiligi rivojlanishida katta ahamiyatga ega bo‘lib, bu chanoq a’zolarining tushishiga va kelajakda tushishiga olib keladi. Norvegiyada o‘tkazilgan tadqiqotlar natijalariga ko‘ra, ayollarning anamnezida tug‘ruqlar soni jinsiy a’zolar prolapsi rivojlanish xavfiga to‘g‘ri proporsional. Shuningdek, homiladorlik va tug‘ruqning asoratli kechishida, tug‘ruqdagi jarrohlik yordamida, tez tug‘ruqlarda, oraliq yoriqlarida, yirik homila bilan tug‘ruqlarda kasallik xavfi sezilarli darajada ortadi [3].

Chanoq tubi yetishmovchiligining sekin va barqaror rivojlanishining yetakchi omili oraliqning shikastlanishi hisoblanadi. Vaqt o‘tishi bilan bu prolaps va asoratlar majmuasining rivojlanishiga olib keladi, bularga qin biotsenozining buzilishi, bachadon bo‘yni kasalliklari, jinsiy disfunksiya, defekatsiya va siydik chiqarishning buzilishi kiradi [4]. Bundan tashqari, chanoq a’zolarining tushishiga qorin bo‘shlig‘i bosimining tez-tez ko‘tarilishi sabab bo‘lishi mumkin [10]. Siydik pufagi va qin devorining yaqin anatomik aloqalari tufayli qin old devorining siydik pufagi bilan birga tushishi yuzaga keladi. Bunday holatda churra qopi rezervuari - siydik pufagi, sistotsele hosil bo‘ladi. Urodinamik asoratlar juda ko‘p uchraydigan yo‘ldosh holat bo‘lib, ular genital prolapsning 50% holatlarida kuzatiladi. Rektotsele ham xuddi shunday mexanizm bo‘yicha shakllanadi. Chanoq tubi mushaklari yetishmovchiligi bo‘lgan har uchinchi ayolda to‘g‘ri ichak tomonidan asoratlar rivojlanadi [12].

Noratsional va travmatik tug‘ruqdan 2-3 yil o‘tgach, bachadon bo‘yni eroziyasi, ektropion va leykoplakiya, najas va siydikni ushlab tura olmaslik, anorgazmiya, jinsiy maylning pasayishi, disparuniya rivojlanish xavfi mavjud [17]. Oraliqning akusherlik jarohatlarining uzoq muddatli oqibatlari tug‘ruqdan keyingi turli muddatlarda yuzaga keladi. Ularni tug‘ruqdan keyin 1-yil ichida shakllanadigan erta va 15-20-yildan keyin shakllanadigan kechki turlarga bo‘lish qabul qilingan. Oraliqning akusherlik shikastlanishining uzoq muddatli oqibatlariga chanoq tubi yetishmovchiligi, siydik va najasni tuta olmaslik, disparuniya, chanoq a’zolarining prolapsi kiradi. Tug‘ruqdan 1 yil o‘tgach, oraliq akusherlik jarohatining ushbu asoratlari chastotasi o‘rtacha 7-10% ni tashkil etadi [30].

Epidemiologik tadqiqotlarga ko‘ra, hozirgi vaqtda ayollarda siydik tuta olmaslikning tarqalishi ortib bormoqda va reproduktiv yoshda 30% ga yetadi [8]. Siydik tuta olmaslikning barcha holatlaridan taxminan 25% oraliqning akusherlik jarohati bilan bog‘liq [18]. Tadqiqot ma’lumotlariga ko‘ra, tabiiy tug‘ruq yo‘llari orqali birinchi tug‘ruqdan 43 oy o‘tgach, siydik va najasni ushlab tura olmaslik holatlari chastotasi 40,8; 6,6; 10,2% ni tashkil etdi. Siydik va axlatni tuta olmaslikning erta namoyon bo‘lishi (qin orqali tug‘ruqdan 8 hafta o‘tgach) 40,1 va 19,5% ayollarda aniqlangan [36]. III-IV darajali oraliq yirtilishlaridan keyin najas tuta olmaslik darajasi taxminan 8% ni tashkil etdi [23]. J. Liu va hammual. stressli siydik tuta olmaslik epizodlari homiladorlik davrida ham uchrashi mumkinligini ko‘rsatdi [26]. O.E. Keag va hammualliflarning ma’lumotlariga ko‘ra, tug‘ruqdan keyin siydik tuta olmaslikning tarqalish statistikasi quyidagicha: stressli siydik tuta olmaslik - 44,9%, shoshilinch siydik tuta olmaslik - 38,2%, aralash siydik tuta olmaslik - 16,9% ayollarda uchraydi. Tug‘ruqdan keyin siydik tuta olmaslik xavfi anamnezda siydik tuta olmaslik mavjud bo‘lganda ortadi [35].

Kesarcha kesish yo‘li bilan tug‘ish siydik tuta olmaslik va jinsiy a’zolar prolapsi xavfini kamaytiradi. R.Y. Cheung va hammualliflarning tadqiqotlarida tabiiy tug‘ruq yo‘llari orqali tug‘ish siydik tuta olmaslik xavfini 10,2% ga, kesarcha kesish operatsiyasi orqali tug‘ish esa 4,5% ga oshirishi isbotlangan. Tug‘ruqdan 3 oy o‘tgach, shoshilinch siydik tuta olmaslikning tarqalishi 26% ni tashkil etdi va tug‘ruqdan 3 oy o‘tgach ham, 12 oydan keyin ham kesarcha kesish bilan solishtirganda vaginal tug‘ruq guruhida sezilarli darajada yuqori bo‘ldi [24].

Har bir vaginal tug‘ruqdan so‘ng tug‘ruq yo‘llarini sinchkovlik bilan tekshirish kerak. Faqat bachadon bo‘yni va oraliq yirtilishlariga emas, balki qin jarohatlari va gematomalariga ham e’tibor berish kerak. Axir, oraliqning yashirin jarohatlari bo‘lishi mumkin va aynan ular chanoq tubi holatining keyingi o‘zgarishida muhim rol o‘ynaydi. Birinchi marta tug‘ayotgan ayollarda oraliqning yashirin shikastlanish chastotasi 26,9% ni, takroran tug‘ayotgan ayollarda esa 8,5% ni tashkil qiladi. Oraliqning yashirin jarohatlarini aniqlash uchun eng ma’lumotli va kam xarajatli usul transperineal ultratovush tekshiruvidir. Ko‘pgina mualliflar ta’kidlaganidek, bir xil yosh guruhida tug‘gan ayollarda tug‘magan ayollarga qaraganda tug‘ruqdan keyingi shikastlanishning tarqalishi yuqori bo‘lib, bu tug‘ruqdan keyingi shikastlanish patogenezida akusherlik jarohatining muhim rol o‘ynashini ko‘rsatishi mumkin [5].

Umumlashtirilgan ma’lumotlarga ko‘ra, 50 yoshdan oshgan ayollarning yarmida PTO belgilari mavjud va ularning 11,1 foizi kasallikni jarrohlik yo‘li bilan tuzatishga muhtoj [21].Odatda, tos a’zolarining prolapsi rivojlanishi reproduktiv yoshda, ko‘pincha tug‘ruqdan keyin boshlanadi. Biroq, prolapsning erta shakllari klinik ko‘rinishlarining juda kamligi bilan ajralib turadi, bu esa bemorlarning kech murojaat qilishi tufayli o‘z vaqtida tashxis qo‘yishga to‘sqinlik qiladi. Hayot sifatini yomonlashtiradigan sezilarli o‘zgarishlar va alomatlar paydo bo‘lgandagina bemor shifokorga murojaat qiladi. Shuni ta’kidlash kerakki, odamlarning umr ko‘rish davomiyligining oshishi va aholining global qarish tendensiyasi tufayli ayollar populyatsiyasining katta qismi menopauzadan keyin hayotining uchdan bir qismidan ko‘prog‘ini yashaydi. Postmenopauza davrida estrogen yetishmovchiligi tufayli yuzaga keladigan gormonal o‘zgarishlar tufayli biriktiruvchi to‘qima mustahkamligining yo‘qolishi ham tos a’zolarining prolapsi shakllanishiga hissa qo‘shishi mumkin.

Aksariyat mualliflarning fikriga ko‘ra, tug‘ruq paytida oraliqning pariteti va shikastlanishi oraliq yetishmovchiligi rivojlanishining asosiy sabablari bo‘lib xizmat qiladi. Asoratli tug‘ruqlar, tug‘ruq paytida jarrohlik yordami, yirik homila bachadon boylam apparati, shuningdek, chanoq tubi mushaklarining haddan tashqari cho‘zilishi va travmatik shikastlanishi omillari bo‘lib, homila tushish xavfini oshiradi [37].

So‘nggi paytlarda nisbatan ko‘p sonli ishlar bachadon prolapsi, sisto- va rektotsele, enterotsele va qin devorlarining tushishi rivojlanishida orqa chiqaruv teshigini ko‘taruvchi mushak shikastlanishining rolini o‘rganishga bag‘ishlangan. Tadqiqotlar davomida aniqlanganidek, orqa chiqaruv teshigini ko‘taruvchi mushaklarning uzilishi sistotsele shakllanishi va bachadon prolapsi bilan bog‘liq. Bundan tashqari, tos a’zolarining prolapsi belgilari va nuqsonning og‘irlik darajasi o‘rtasida to‘g‘ridan to‘g‘ri bog‘liqlik aniqlandi. Bachadon prolapsi rivojlanishining eng yuqori xavfi mushakning ikki tomonlama uzilishi bo‘lgan bemorlarda aniqlangan; bir tomonlama uzilish bilan patologik o‘zgarishlar ehtimoli kamroq. Biroq, ushbu xulosalarga qaramay, tos a’zolarining prolapsi belgilari orqa teshikni ko‘taruvchi mushaklari shikastlangan barcha ayollarda ham aniqlanmaydi. Shunday qilib, prolaps boshlanishiga har xil omillarning kompleks ta’siri olib kelishi mumkin, degan taxmin bor. Tos a’zolarining prolapsi shakllanishida biriktiruvchi to‘qima tuzilishining genetik buzilishlari - biriktiruvchi to‘qima displaziyasi (BTD) ham ma’lum ahamiyatga ega. Binobarin, kasallikning yaqqol klinik ko‘rinishlari hali mavjud bo‘lmaganda, aynan tos a’zolarining prolapsining erta shakllarini o‘z vaqtida tashxislash zarur. Tos a’zolarining prolapsini tashxislash uchun tos tubini baholashning turli usullari, jumladan KT, MRT, UTT va rentgenoskopik defektografiya qo‘llaniladi. Tos tubi mushaklarini baholashning boshqa usullaridan UTTning afzalliklari quyidagilardan iborat: qulayligi, arzonligi va ionlashtiruvchi nurlanishning yo‘qligi. Ushbu usul yordamida BTO bilan og‘rigan bemorlarda chanoq tubi tuzilmalari holatining to‘liq dinamik tasvirini olish mumkin. Siydik pufagi devorining morfologik xususiyatlari va siydik pufagi o‘tish joyining harakatchanligini

sonografik usulda ham baholash mumkin. Bundan tashqari, tos a'zolarining prolapsi ni jarrohlik yo'li bilan tuzatgandan so'ng chanoq tubi tuzilmalarini vizualizatsiya qilish uchun UTT qo'llaniladi.

Chanoq tubi mushaklar va biriktiruvchi to'qimalardan iborat bo'lib, ular innervatsiya va qon bilan ta'minlanadi hamda uch o'lchamli tuzilmaga birlashadi (3 ta tayanch darajasi). Qin devori, siydik pufagi va to'g'ri ichak o'rtasidagi yaqin anatomik munosabatlar a'zolarning birgalikda tushishiga va keyinchalik ularning funksional buzilishlarining shakllanishiga yordam beradi. Prolapsning rivojlanishi reproduktiv yoshda boshlanadi, yaqqol ifodalanmagan va o'ziga xos bo'lmagan klinik ko'rinishlar bilan kechadi va vaqt o'tishi bilan kuchayib boradi. Aksariyat tadqiqotlarga ko'ra, chanoq tubi jarohati prolaps rivojlanishining asosiy sababi, homila vazni esa tug'ruqdan keyin uning tez paydo bo'lishining asosiy xavf omillaridan biri hisoblanadi (levatorlar shikastlanishining yuqori chastotasi tufayli).

Ba'zi tadqiqotlarda UTT da levator nuqsoni o'lchamlari va prolaps belgilari va/yoki belgilari o'rtasida to'g'ridan-to'g'ri bog'liqlik ko'rsatilgan. UTT bo'yicha chanoq tubi shikastlanishining belgisi levatorlarning vizual shikastlanishi (birinchi navbatda, uzilish) yoki zo'riqish paytida qinga kirishning kengayishi hisoblanadi. Levatorlarning uzilishi (ayniqsa, qindagi jarrohlik tug'ruqlari, homilaning vakuum ekstraksiyasidan so'ng) qinga kirish yo'lining kengayishiga va vaqt o'tishi bilan prolapsning rivojlanishiga olib keladi. Levatorlarning ikki tomonlama shikastlanishi (uzilib ketishi) bo'lgan bemorlarda ko'pincha bachadonning tushishi (tushib ketishi) aniqlanadi. Shu bilan birga, levatorlar shikastlangan ba'zi ayollarda tos a'zolarining prolapsi ning klinik belgilari yo'q, ammo levatorlardagi o'zgarishlarning kuchayishi prolaps bosqichining ko'payishini anglatadi. Prolaps bosqichi qanchalik og'ir bo'lsa, levatorlarda shunchalik yaqqol o'zgarishlar aniqlanadi, bu ularning shikastlanishining tos a'zolarining prolapsi patogenezidagi ahamiyatini ko'rsatadi.

Agar UTTda levatorlarning sezilarli shikastlanishini aniqlash vaqtida prolapsning klinik belgilari hali bo'lmasa, ular vaqt o'tishi bilan rivojlanadi. Qin devorlarining pastga tushishining erta shakllari bo'lgan bemorlarda BTDning og'ir shakllarining klinik va ultratovush belgilarining yo'qligi prolapsning asta-sekin rivojlanishi va uning og'irroq shakllarga sekin rivojlanishi BTD bo'lmagan yoki uning yengil ko'rinishlari bo'lgan ayollarda ham mumkinligini taxmin qilish imkonini beradi. Simptomatik tos a'zolarining prolapsi vaqt o'tishi bilan, tug'ruqdan keyin rivojlanadi, ammo siydik chiqarish buzilishi bo'lgan bemorlarda o'tkazilgan ko'plab tadqiqotlar tug'ruqdan bir necha oy o'tgach, retrospektiv ravishda barcha hollarda tos suyagi tubining shikastlanishini aniqlaydi. Shubhasiz, bu asimptom prolaps tushunchasining yo'qligini tasdiqlaydi. Bevosita tug'ruqdan keyin chanoq tubining UTT chanoq tubining travmatik shikastlanishi tashxisi qo'yilgan bemorlarda BTO rivojlanishi bo'yicha xavf guruhini ajratish imkonini beradi.

Chanoq tubi holatini baholashda, tug'ruqdan keyingi anatomik buzilishlarning og'irlik darajasini aniqlashda ultratovush tekshiruvi katta yordam berishi mumkin. Tadqiqotning noinvazivligi tug'ruqdan keyingi davrning istalgan muddatida nazorat o'tkazish imkonini beradi.

Zamonaviy amaliyotda tug'ruqdan keyingi davrda ultratovush diagnostikasidan foydalanish faqat bachadon bo'shlig'ini tekshirish bilan cheklanadi, bir vaqtning o'zida tabiiy tug'ruq yo'llari orqali tug'ruqdan keyin tos tubini ultratovush tekshiruvi tosni qo'llab-quvvatlovchi tuzilmalarning chuqur shikastlanishini, shu jumladan orqa yo'lni ko'taruvchi kompleks mushaklarini, siydik-tanosil diafragmasi mushaklarini va urogenital yoriqni shakllantiruvchi mushaklarni ko'rish imkonini beradi [9]. Ultratovush tekshiruvi natijalarining bemor shikoyatlari bilan bog'liqligi davolash natijalarini yaxshilashi mumkin, chunki shifokor asosiy muammoga samaraliroq ta'sir ko'rsatish imkoniyatiga ega bo'ladi [28].

Shunday qilib, oraliq gematomasi va choklar qo'yilgan sohada gemostaz nuqsonlariga shubha qilinganda, oraliq sohasida gematomalar shakllanganda, reparativ jarayonning kechishini baholash zarur bo'lganda, infeksion-yallig'lanish asoratlariga shubha qilinganda va asoratlarning klinik ko'rinishlari bo'lmaganda turg'un og'riq belgilariga shikoyat qilinganda ultratovush tekshiruvini o'tkazish tug'ruqdan keyingi davrning kechishini sezilarli darajada yengillashtirishi va yaxshilashi mumkin.

Oraliqning shikastlanishi multifokal bo'lib, nafaqat yaqin, balki uzoq muddatli tug'ruqdan keyingi davrda ham ayollarning jismoniy, ruhiy va ijtimoiy salomatligiga ta'sir qiladi. Salomatlikning psixologik va ijtimoiy buzilishlari ko'krak suti bilan oziqlantirish, sherik bilan munosabatlar va jinsiy munosabatlar muammolarida aks etadi [27]. Buyuk Britaniyadagi tadqiqotlarda tug'ruqdan keyingi davrdagi ayollarda og'riq va asoratlar bo'yicha so'rov o'tkazilgan. So'ralganlarning taxminan 23-42% tug'ruqdan keyingi dastlabki 10-12 kun ichida og'riq va noqulaylikni boshdan kechiradi, ayollarning 7-10% tug'ruqdan keyingi 3-18 oy davomida og'riqni boshdan kechirishda davom etadi. Shuningdek, ishtirokchilarning 23 foizi tug'ruqdan 3 oy o'tgach yuzaki dispareuniya, 3-10 foizi najas tuta olmaslik, 24 foizgacha ayollar siydik chiqarish bilan bog'liq muammolarni qayd etadilar [42]. Infeksiya uchun to'g'ridan to'g'ri kirish darvozasi oraliqning patofiziologik yirtilishi va kesilishi bo'lib, 2021-yilgi Milliy akusherlik qo'llanmasi ma'lumotlariga ko'ra, tug'ruq paytida oraliq jarohatlarini davolash sifatidan qat'i nazar, tug'ruqdan keyingi 2-4 oy ichida 19,3% ayollarda infeksion asoratlar rivojlanishi mumkin. Bu ko'pincha choklarning yetishmovchiligiga, yiringlashga va keyinchalik ikkilamchi taranglik bilan bitishga olib keladi.

Shu bilan birga, homilador ayollarning yuqori infektsiya darajasi yuqumli jarayonlarning rivojlanishiga hissa qo'shadi. Qinning yallig'lanish jarayonlari: vaginit, vulvovaginit, kolpit va boshqalar tug'ruq yo'llari to'qimalarining shikastlanish xavfini sezilarli darajada oshiradi. Hatto tug'ruq yo'llari yumshoq to'qimalarining ahamiyatsiz yirtilishlari ham chanoq tubi mushaklarining funksional yetishmovchiligi rivojlanishida katta ahamiyatga ega bo'lib, bu chanoq a'zolarining tushishiga va kelajakda tushishiga olib keladi. Norvegiyada o'tkazilgan tadqiqotlar natijalariga ko'ra, ayollarning anamnezida tug'ruqlar soni jinsiy a'zolar prolapsi rivojlanish xavfiga to'g'ri proporsional. Shuningdek, homiladorlik va tug'ruqning asoratli kechishida, tug'ruqdagi jarrohlik muolajalarida, tezkor tug'ruqlarda, oraliq yirtilishlarida, yirik homila bilan tug'ruqlarda kasalliklar xavfi sezilarli darajada oshadi .

Chanoq tubi yetishmovchiligining sekin va barqaror rivojlanishining yetakchi omili oraliqning shikastlanishi hisoblanadi. Vaqt o'tishi bilan bu prolaps va asoratlar majmuasining rivojlanishiga olib keladi, ularga qin biotsenozining buzilishi, bachadon bo'yni kasalliklari, jinsiy disfunksiya, defekatsiya va siydik chiqarishning buzilishi kiradi.

Siydik pufagi va qin devorining yaqin anatomik aloqalari tufayli qin old devorining siydik pufagi bilan birga tushishi yuzaga keladi. Bunday holatda churra qopi rezervuari - siydik pufagi, sistotsele hosil bo'ladi. Urodinamik asoratlar juda ko'p uchraydigan yo'ldosh holat bo'lib, ular genital prolapsning 50% holatlarida kuzatiladi. Rektotsele ham xuddi shunday mexanizm bo'yicha shakllanadi. Chanoq tubi mushaklari yetishmovchiligi bo'lgan har uchinchi ayolda to'g'ri ichak tomonidan asoratlar rivojlanadi [13].

Epidemiologik tadqiqotlarga ko'ra, hozirgi vaqtda ayollarda siydik tuta olmaslikning tarqalishi ortib bormoqda va reproduktiv yoshda 30% ga yetadi. Siydik tuta olmaslikning barcha holatlaridan taxminan 25% oraliqning akusherlik jarohati bilan bog'liq [20]. Tadqiqot ma'lumotlariga ko'ra, tabiiy tug'ruq yo'llari orqali birinchi tug'ruqdan 43 oy o'tgach, siydik va najasni tuta olmaslik holatlari chastotasi 40,8; 6,6; 10,2% ni tashkil etdi. Siydik va axlatni tuta olmaslikning erta namoyon bo'lishi (vaginal tug'ruqdan 8 hafta o'tgach) 40,1 va 19,5% ayollarda aniqlangan.

Har bir vaginal tug'ruqdan so'ng tug'ruq yo'llarini sinchkovlik bilan tekshirish kerak. Faqat bachadon bo'yni va oraliq yirtilishlariga emas, balki qin jarohatlari va gematomalariga ham e'tibor berish kerak. Axir, oraliqning yashirin jarohatlari bo'lishi mumkin va aynan ular chanoq tubi holatining keyingi o'zgarishida muhim rol o'ynaydi. Birinchi marta tug'ayotgan ayollarda oraliqning yashirin jarohatlari chastotasi 26,9% ni, takroran tug'ayotgan ayollarda esa 8,5% ni tashkil qiladi. Oraliqning yashirin jarohatlarini aniqlash uchun eng ma'lumotli va kam xarajatli usul transperineal ultratovush tekshiruvi hisoblanadi.

Ko'pgina mualliflar ta'kidlaganidek, bir xil yosh guruhida tug'gan ayollarda tug'magan ayollarga qaraganda tug'ruqdan keyingi

shikastlanishning tarqalishi yuqori bo‘lib, bu tug‘ruqdan keyingi shikastlanish patogenezida akusherlik jarohatining muhim rol o‘ynashini ko‘rsatishi mumkin. Umumlashtirilgan ma’lumotlarga ko‘ra, 50 yoshdan oshgan ayollarning yarmida tos a’zolarining prolapsi belgilari mavjud va ularning 11,1% kasallikni jarrohlik yo‘li bilan tuzatishga muhtoj.

Aksariyat mualliflarning fikriga ko‘ra, tug‘ruq paytida oraliqning pariteti va shikastlanishi oraliq yetishmovchiligi rivojlanishining asosiy sabablari bo‘lib xizmat qiladi. Asoratlangan tug‘ruqlar, tug‘ruqdagi jarrohlik yordami, yirik homila bachadon boylam apparati, shuningdek, chanoq tubi mushaklarining haddan tashqari cho‘zilishi va travmatik shikastlanishi omillari bo‘lib, BTO xavfini So‘nggi paytlarda nisbatan ko‘p sonli ishlar bachadon prolapsi, sisto- va rektotsele, enterotsele va qin devorlarining tushishi rivojlanishida orqa teshikni ko‘taruvchi mushak shikastlanishining rolini o‘rganishga bag‘ishlangan. Tadqiqotlar davomida aniqlanganidek, orqa chiqaruv teshigini ko‘taruvchi mushaklarning uzilishi sistotsele shakllanishi va bachadon prolapsi bilan bog‘liq. Bundan tashqari, tos a’zolarining prolapsi belgilari va nuqsonning og‘irlik darajasi o‘rtasida to‘g‘ridan to‘g‘ri bog‘liqlik aniqlandi. Bachadon prolapsi rivojlanishining eng yuqori xavfi ikki tomonlama mushak uzilishi bo‘lgan bemorlarda aniqlangan; bir tomonlama uzilishda patologik o‘zgarishlar ehtimoli pastroq.

Chanoq a’zolari prolapsini tashxislash uchun chanoq tubini baholashning turli usullari, jumladan KT, MRT, UTT va rentgenoskopik defektografiya qo‘llaniladi. Tos tubi mushaklarini baholashning boshqa usullariga nisbatan ultratovush tekshiruvining afzalliklari mavjudligi, arzonligi va ionlashtiruvchi nurlanishning yo‘qligidir. Ushbu usul yordamida chanoq a’zolari prolapsi bo‘lgan bemorlarda chanoq tubi tuzilmalari holatining to‘liq dinamik tasvirini olish mumkin. Siydik pufagi devorining morfologik xususiyatlari va siydik pufagi o‘tish joyining harakatchanligini sonografik usulda ham baholash mumkin. Bundan tashqari, ultratovush tekshiruvi chanoq a’zolari prolapsini jarrohlik yo‘li bilan tuzatgandan so‘ng chanoq tubi tuzilmalarini ko‘rish uchun qo‘llaniladi.

Ba’zi tadqiqotlarda ultratovush tekshiruvida levator nuqsoni o‘lchamlari va prolaps belgilari o‘rtasida to‘g‘ridan-to‘g‘ri bog‘liqlik mavjudligi ko‘rsatilgan. Ultratovush tekshiruvi bo‘yicha chanoq tubi shikastlanishining belgisi levatorlarning vizual shikastlanishi (birinchi navbatda, uzilish) yoki zo‘riqish paytida qin teshigining kengayishi hisoblanadi. Levatorlarning uzilishi (ayniqsa, vaginal jarrohlik tug‘ruqlari, homilani vakuum ekstraksiyasidan so‘ng) vaginal kirishning kengayishiga va vaqt o‘tishi bilan tos a’zolarining prolapsi rivojlanishiga olib keladi. Levatorlarning ikki tomonlama shikastlanishi (uzilib ketishi) bo‘lgan bemorlarda ko‘pincha bachadonning pastga tushishi (tushib ketishi) aniqlanadi.

Shu bilan birga, ba’zi levatorlar shikastlangan ayollarda tos a’zolarining prolapsi ning klinik belgilari yo‘q, ammo levatorlardagi o‘zgarishlarning kuchayishi prolaps bosqichining ko‘payishini anglatadi. Prolaps bosqichi qanchalik og‘ir bo‘lsa, levatorlarda shunchalik sezilarli o‘zgarishlar aniqlanadi, bu ularning jarohati tos a’zolari prolapsi patogenezida muhim ahamiyatga ega ekanligini ko‘rsatadi. Agar ultratovush tekshiruvini o‘tkazish va levatorlarning sezilarli shikastlanishini aniqlash paytida prolapsning klinik belgilari hali aniqlanmagan bo‘lsa, ular vaqt o‘tishi bilan rivojlanadi.

Simptomatik tos a’zolarining prolapsi vaqt o‘tishi bilan, tug‘ruqdan keyin rivojlanadi, ammo siydik chiqarish buzilishi bo‘lgan bemorlarni tug‘ruqdan bir necha oy o‘tgach retrospektiv ravishda ko‘plab tekshirishlar barcha hollarda tos suyagi tubining shikastlanishini aniqlaydi. Shubhasiz, bu asimptom prolaps tushunchasining yo‘qligini tasdiqlaydi. Bevosita tug‘ruqdan keyin chanoq tubi ultratovush tekshiruvi chanoq tubining travmatik shikastlanishi tashxisi qo‘yilgan bemorlarda tos a’zolarining prolapsi rivojlanishi uchun xavf guruhini aniqlashga imkon beradi.

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ПРОЛАПС ПОЛОВЫХ ОРГАНОВ И ДОБРОКАЧЕСТВЕННЫЕ ОПУХОЛИ МАТКИ И ЕЕ ПРИДАТКОВ (ОБЗОР ЛИТЕРАТУРЫ)

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JINSIY A'ZOLAR PROLAPSI XAMDA BACHADON VA UNING ORTIQLARINING YAXSHI SIFATLI O'SMALARI (ADABIYOTLAR TAHLILI)

Genital prolapse (GP) is defined as a disturbance in the normal anatomical positioning of the vaginal walls and/or uterus, presenting as a descent of the pelvic organs toward the vaginal opening or their protrusion beyond it. Some authors view GP as a type of pelvic hernia at the level of the vaginal entrance (Lysitsa V., 2015). In such instances, the hernial formation typically consists of a hernial orifice, a hernial sac, and its contents, which can include the internal reproductive organs, as well as the urinary bladder, rectum, and, in certain cases, loops of the small intestine [11].

Numerous researchers (Subak L. L., Waetjen L. E., Vanden Eaden S. et al., 2001) [12] note that genital prolapse is common worldwide among women in reproductive, perimenopausal, and postmenopausal stages. Almost every second woman over 50 years of age experiences this condition, and 11.1% of those affected require surgical intervention. According to the World Health Organization (WHO), by 2030, approximately 63 million women across the globe will be affected by GP, as the elderly population is expected to double, thereby intensifying the urgency of this issue.

In recent years, the United States has reported an increase in pelvic organ prolapse: current estimates indicate that the number of affected women will rise from 3.3 million to 4.9 million by 2050, which is an increase of over 33% [13,14]. During the past century, profound societal shifts have taken place in women's lives, families, and communities. Women's roles and lifestyles have transformed, the nature of work and daily activities has changed, and physical activity levels have declined. Despite this, the problem of GP persists. Even though our understanding of its etiology and pathogenesis has advanced significantly, and numerous risk factors have been identified along with many corrective techniques, medicine has yet to offer a definitive solution to genital

prolapse or effectively lower its prevalence (Radzinsky V. E., Durandin Yu. M., Gagaev Ch. G., 2006).

Currently, two main classifications of pelvic organ prolapse (POP) are in widespread use: the Baden–Walker system and the Pelvic Organ Prolapse Quantification System (POP-Q).

In 1992, Baden W.F. and Walker T. introduced a semi-quantitative approach to evaluate the degree of POP by measuring the distance between the prolapsed organ and the hymen during physical strain. This "halfway" method uses the midpoint between the organ's normal position and the hymen as its reference:

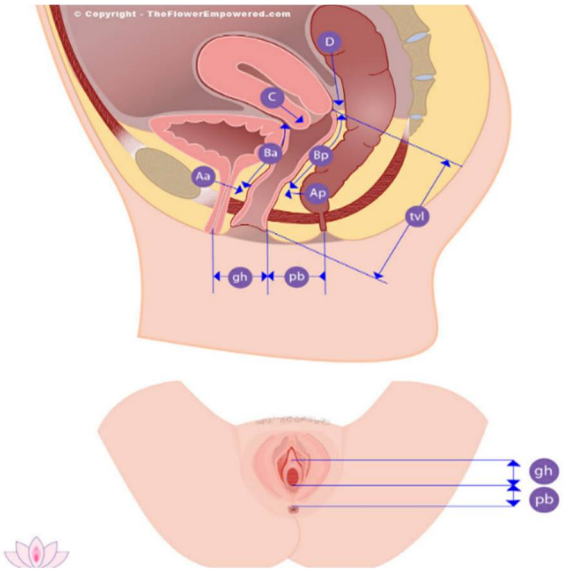
Grade I – The organ descends to a point halfway toward the hymen.

Grade II – The prolapsing organ reaches the level of the hymen.

Grade III – The prolapsed organ extends beyond the hymen, descending up to halfway past it.

Grade IV – Complete externalization of the prolapsed genital organ.

Meanwhile, the International Urogynecological Association (IUGA) Standardization of Terminology Committee has adopted the Pelvic Organ Prolapse Quantification System (POP–Q). This system relies on quantitative measurements at nine specific anatomical landmarks when the prolapse is most pronounced (e.g., during a Valsalva maneuver). Each measured point is documented in centimeters relative to the plane of the hymen, with positions above this plane labeled as negative values and those below it labeled as positive.



The key anatomical landmarks include:

Aa– Urethrovesical segment (anterior vaginal wall) Ba – Most distal point of the anterior vaginal wall Ar – Most distal point of the posterior rectal wall Bp – Most distal point of the posterior vaginal wall above the levator ani C – Cervix D – Posterior fornix (only in women with uterus) TVL – Total vaginal length Gh – Genital hiatus Pb – Perineal body. Accordingly, six anatomical points (Aa, Ba, Ar, Bp, C, D) are measured relative to the hymenal ring — if located above (proximal) the hymen, the measurement is negative (in centimeters); if below (distal) the hymen, the measurement is positive. The other three parameters (TVL, Gh, and Pb) are measured directly. The stage of prolapse is determined based on the most descended point of the vaginal wall. Typically, this involves the anterior wall (Ba point), the apical compartment (C point), or the posterior vaginal wall (Bp point).

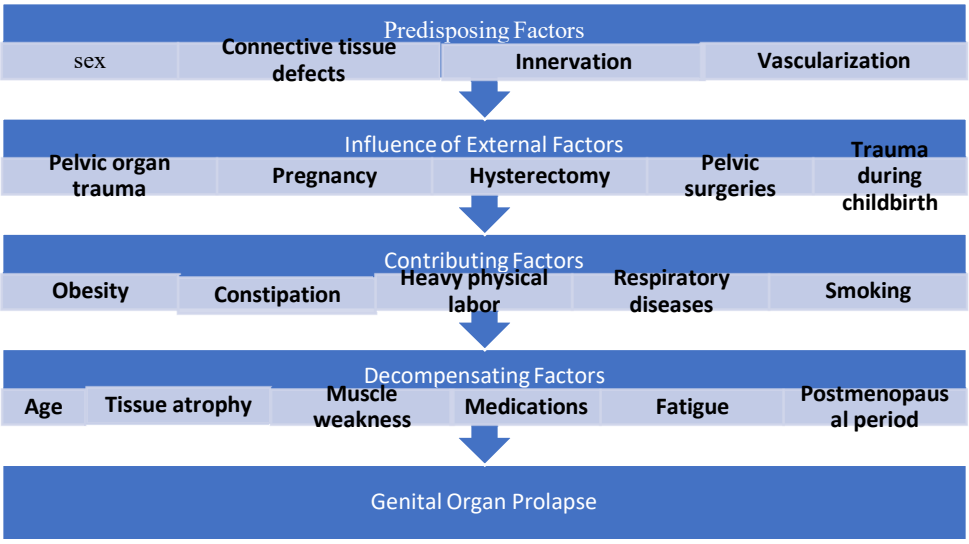
According to numerous sources, the risk factors for genital prolapse are divided into four groups:

1.Predisposing factors – genetic, hereditary factors, and innervation-related issues;

2.External factors – pregnancy, childbirth, pelvic floor surgery, hysterectomy, muscle trauma, and nerve injuries;

3.Contributing factors – increased body weight, smoking, lung diseases, constipation, and heavy physical labor;

4.Decompensating factors – advanced age, postmenopausal period, myopathy, neuropathy, and fatigue.



Genital organ prolapse (GOP) continues to pose a significant global health challenge by substantially reducing the quality of life for countless women [3,6,9]. In recent years, an increasing number of cases have been diagnosed among women younger than 45 [4,2]. Currently, the sole definitive treatment for GOP is surgical, with numerous surgical strategies—vaginal approaches, abdominal laparotomy, and laparoscopic techniques—documented in the literature [1,6,7]. Over time, evolving perspectives on GOP pathogenesis have prompted shifts in treatment methods. Nonetheless, no procedure has yet established itself as the "gold standard," since none have shown distinctly superior long-term results [9,1].

The limited success of procedures that rely solely on the patient's own tissues, coupled with high recurrence rates, led to the development of alternative strategies involving synthetic materials that form a supportive structure for the pelvic organs [4,6]. Published data indicate that GOP repair using mesh implants may succeed in up to 90–95% of cases [1]. However, even though mesh use has enhanced treatment outcomes, it has also introduced new complications, predominantly attributed to the "blind" component of the procedure [2,6]. The choice between using native tissue repair or mesh implants for GOP correction remains under active debate, as high complication rates and the scarcity of robust randomized clinical trials have sparked concerns regarding the long-term safety of mesh-based interventions [5,8].

Given that GOP affects 28–39% of women, often manifests early, and exhibits high recurrence following surgical intervention, it remains one of the most urgent issues facing modern gynecology. Despite technical advancements, the overall incidence of GOP has yet to show a meaningful decline [A.I. Ishchenko, T.V. Gavrilova, A.A., Questions of Gynecology, Obstetrics, and Perinatology, 2020].

Moreover, recent observations point to GOP occurring in younger patients, with severe forms frequently involving dysfunction of nearby organs. In advanced stages (III–IV), GOP commonly coincides with urogenital and anorectal disturbances, causing changes in the vaginal topography and microbiota. These disruptions can trigger bacterial vaginosis, cervical inflammation (cervicitis), trophic ulcerations of the vaginal walls, cervical elongation, and chronic endocervicitis; in many instances, multiple such conditions appear simultaneously [B.B. Negmadjanov, H.Sh. Shavkatov, American Journal of Medicine and Medical Sciences, 2021].

Studies indicate that pelvic floor prolapse is particularly common in reproductive-aged women with a history of complicated obstetric events, with prevalence reaching up to 39.5% [Negmadjanov B.B., Shavkatov H.Sh., 2022]. GOP is recognized as a serious issue affecting reproductive-aged women, impacting both their quality of life and reproductive health. Research suggests that pregnancy, childbirth, congenital connective tissue disorders, obesity, and hormonal imbalances are key contributing factors to GOP development [Barber MD, Maher C., Pelvic Organ Prolapse, The Lancet, 2022]. Early-stage GOP is often undiagnosed, leading to a greater need for surgical intervention in later stages.

Surgical treatment remains the primary approach to managing GOP, yet it continues to present challenges due to its recurrence rates and the need for individualized surgical planning. According to L.V. Adamyan (2006), GOP is a complex condition due to its widespread occurrence, early onset, multifaceted impact on pelvic organ function, associated extragenital pathologies, and high recurrence risk following surgical correction [1,6,8].

Data from Krasnopolsky indicate that GOP affects 15-30% of reproductive-aged women, with prevalence rising to 40% among women over 50 years old. Recent studies have shown that traditional vaginal surgical techniques are no longer the dominant approach for GOP correction. There has been a growing trend toward minimally invasive techniques using synthetic, non-absorbable materials. Various modifications of surgical techniques, including laparovaginal approaches, have been described in the literature. However, despite the abundance of surgical options, no universally effective method has been identified. Additionally, there is no standardized approach for selecting the optimal surgical technique, primarily due to the risk of recurrence and the incomplete resolution of functional disorders.

Among GOP patients, those with coexisting uterine pathology represent a unique subset. Hysterectomy remains one of the most commonly performed gynecological procedures, yet long-term outcomes highlight the importance of evaluating the risk of vault prolapse recurrence. The question of determining the extent of surgical intervention during hysterectomy remains unresolved. While some researchers advocate for total uterine extirpation [9,7,2], others suggest that subtotal hysterectomy may be preferable due to potential adverse effects on women's health [Askolskaia S.I., 1998; Makarov O.V. et al., 2000].

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ОРИГИНАЛЬНЫЕ СТАТЬИ/ ORIGINAL ARTICLES

УДК: 618.514.8-07

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РЕТРОСПЕКТИВНЫЙ АНАЛИЗ ЖЕНЩИН С ПРЕЖДЕВРЕМЕННЫМИ РОДАМИ, ОСЛОЖНЁННЫМИ АКУШЕРСКИМ КРОВОТЕЧЕНИЕМ

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АННОТАЦИЯ

Решение проблемы преждевременных родов (ПР) является сложной медико-социальной проблемой, связанной с улучшением качества последующей жизни детей, родившихся раньше срока, а также с сопряженными с этим финансовыми проблемами. Преждевременные роды увеличивают риск осложнений, связанных с недоношенностью. В настоящее время перед акушерами стоят две основные задачи: выявление потенциально опасных преждевременных родов, чтобы избежать неправильных операций, и подготовка плода к преждевременному рождению с помощью достаточного количества безопасных медикаментов. Большинство осложнений, связанных с материнством, проявляются во время беременности, и многие из них можно предотвратить или вылечить.
Ключевые слова: амниотическая жидкость, плод, плацента, перинатальная патология, преждевременные роды.

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AKUSHERLIK QON KETISHI BILAN ASORATLANGAN MUDDATDAN OLDIN TUG'GAN AYOLLARNING RETROSPEKTIV TAHLILI

ANNOTATSIYA

Muddatdan oldingi tug’ruq -bu erta tug'ilgan va tegishli moddiy-iqtisodiy xarajatlar bilan tug'ilgan bolalarning keyingi hayot sifatini yaxshilash muammolarini hal qilish bilan bog'liq murakkab tibbiy va ijtimoiy muammo. Erta tug'ilish bilan bog'liq asoratlarning og'irligi erta tug'ilishning homiladorlik davriga mutanosibdir. Hozirgi vaqtda akusherlar oldida ikkita asosiy vazifa turibdi: noo'rin aralashuvlarning oldini olish uchun xavfli erta tug'ilishni aniqlash va homilani etarli va shu bilan birga xavfsiz dorilar yordamida erta tug'ilishga tayyorlash. Onalik asoratlarining aksariyati homiladorlik paytida rivojlanadi va ularning ko'pini oldini olish yoki davolash mumkin.
Kalit so'zlar: muddatdan oldingi tug’ruq, amniotik suyuqlik, homila, platsenta, perinatal patologiya.

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RETROSPECTIVE ANALYSIS OF WOMEN WITH PREMATURE BIRTH COMPLICATED BY OBSTETRIC BLEEDING

ABSTRACT

Premature birth (PB) is a complicated medical and social issue that involves addressing issues to enhance the quality of life for children born before their due dates as well as the related financial and material expenses. The gestational age of premature delivery is directly correlated with the severity of prematurity-related problems. Obstetricians currently have two primary responsibilities: identifying potentially dangerous preterm births to prevent inappropriate interventions and preparing the fetus for preterm birth with the use of appropriate and safe drugs. Pregnancy causes the majority of maternal problems, many of which are preventable or curable.
Keywords: perinatal pathology, fetus, placenta, amniotic fluid, premature birth.

Введение. Исследования результатов родов ретроспективной группы, проведенные в филиале Республиканского специализированного научно-практического медицинского центра здоровья матери и ребенка г. Самарканда (главный врач Хамраева Л.К., г. Самарканд), были использованы для определения факторов риска преждевременных родов.

При выборе историй родов обращали внимание на исход родов (осложнения в виде кровотечений). Изучено 171 история

преждевременных родов, которые осложнились патологической кровопотерей в сроках гестации 28-34 недель беременности.

Средний возраст женщин варьировал от 17 до 37 лет (рис 1).

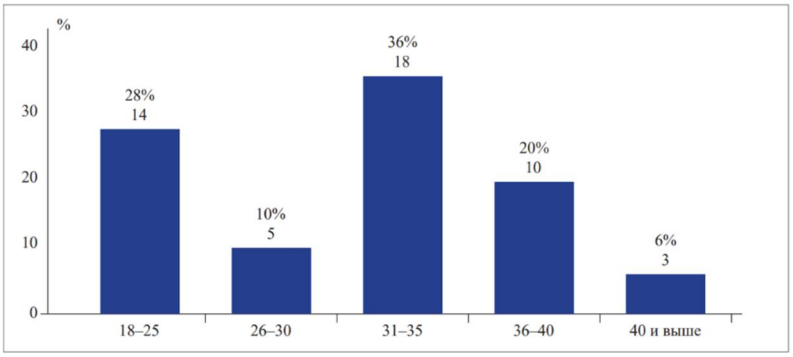

Рисунок 1. Возраст женщин ретроспективной группы.

У женщин возраст 18–25 лет составил 14 женщин (28%), возраст 26–30 лет составил 5 женщин (10%), возраст 31–35 лет составил 18 женщин (36%), возраст 36–40 лет составил 10 женщин (20%), а возраст более 40 лет составил 3 женщин (6%). В зависимости от социального статуса преобладали домохозяйки (46,0%), работающие (39,4%) и студенты (14,5%).

В результате исследования менструальной функции было обнаружено, что средний возраст менархе составил 12 плюс-минус 3 года, продолжительность менструаций составила 5,07 плюс-минус 2,1 дня, а возраст начала половой жизни составил 18 плюс-минус 3,1 года. Возраст наступления менархе, продолжительность менструации, количество теряемой крови и жалобы на боль использовались для оценки менструальной функции беременных (рис. 2).

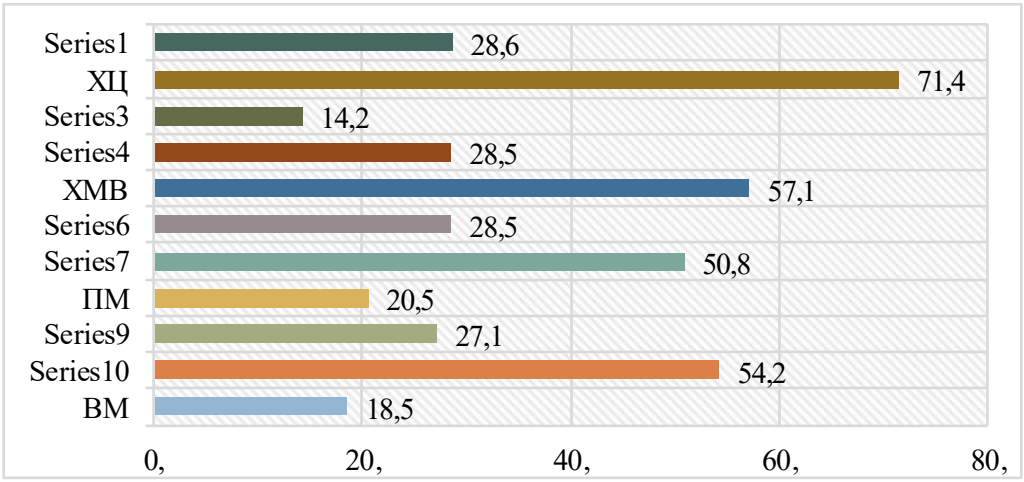

Рисунок 2. Характеристика менструальной функции.

Примечание. ВМ – возраст менархе, ПМ – продолжительность менструации, ХМВ – характер менструальных выделений, ХЦ – характер цикла

При беременности женщины чаще жаловались на следующие проблемы: частый стресс, вредные привычки, профессиональные вредности, угроза прерывания беременности, преэклампсия или эклампсия в анамнезе, маловодие или многоводие и соматическая патология (рис. 3.3). Наличие и частота ЭГЗ у обследованных женщин имели решающее значение для развития осложнений. У 61 % женщин в анамнезе были воспалительные заболевания в детстве, такие как ОРВИ (98%), болезни органов дыхания, уха, горла и носа (85%), заболевания почек (56%), и анемия (61,4%), которые могли повлиять на состояние различных органов и систем, пока будущая женщина развивается в репродуктивном возрасте. Воспалительные заболевания полового тракта были основной проблемой, обнаруженной при сборе гинекологического анамнеза; наиболее распространенными из них были кольпиты (61,4%), воспалительные заболевания матки (39,3%) и нарушения менструальной функции (16,2%).

Немаловажное значения для текущей беременности имели исходы предыдущих беременностей.

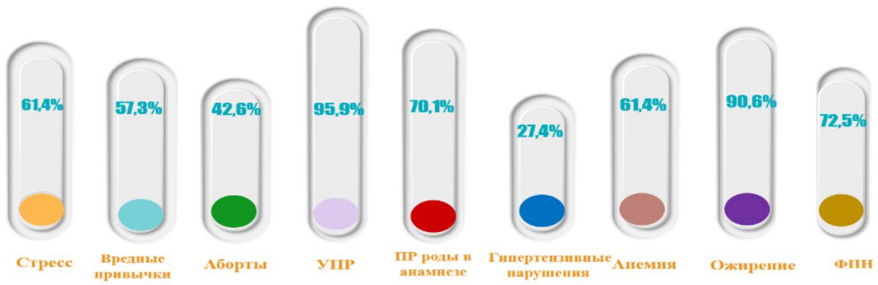

Рисунок 3. Анализ факторов риска ретроспективной группы.

У беременных с прерыванием беременности акушерский анамнез отличается высоким уровнем абортов (42,6%), риском преждевременных родов (95,9%), отслойкой нормально расположенной плаценты (2,9%) и гипертензией (19,3%) (рис. 3).

Среди обследованных первородящих было 30%, а среди повторнородящих 70% по паритету (рис. 3.4). Изучение паритета женщин показало:

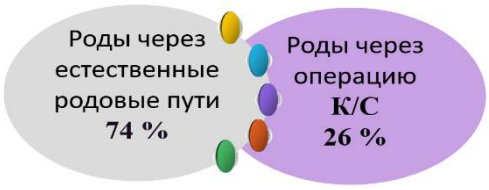

Рисунок 4. Паритет женщин с ПР, осложненном атоническим кровотечением.

1-е роды — (30%), 2–3-и роды — (25%), 4-е и более роды — (45%). Большинство женщин с ПР осложнёнными кровотечением были повторнородящими (63,1%), первородящие составили 36,9% (рис.5).

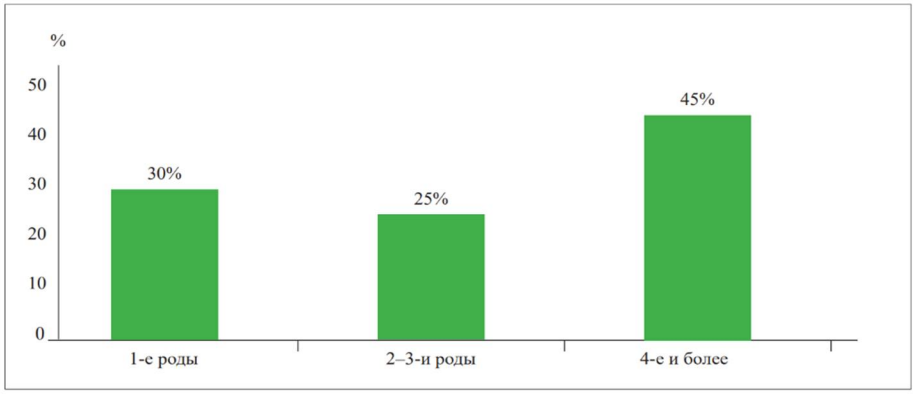

Рисунок 5. Количество ПР и атонических кровотечений при ПР

В Самаркандской области по данным согласно данным, за период с 2016 по 2018 гг., как и по всей стране в целом сохраняется общая тенденция к увеличению частоты преждевременных родов и атонических кровотечений при ПР. Согласно данным представленном на рисунке 3.5., видно, что из года в год увеличивается частота атонических кровотечений во время родов и в послеродовом периоде при преждевременных родах. Это, несомненно, ведет к увеличению социальной проблемы и акушерских осложнений.

Анализируя исход родов ретроспективной группы выявлено, что роды закончились через естественные родовые пути в 74% (127) случаев и путем операции кесарево сечение в 26 % (44) (рис.6).

Рисунок 6. Методы родоразрешения в ретроспективной группе.

По данным литературы установлено, что физиологической кровопотерей считается кровопотеря до 10% ОЦК (до 500мл) при родоразрешении через естественные родовые пути, и до 1000мл – при кесаревом сечении, патологической – 10-30% ОЦК (>500 мл) – ЕРП, >1000мл КС, массивной более - 30% ОЦК.

Было установлено, что патологическая кровопотеря встречалось в 100% случаев, учитывая специальный выбор историй.

Объем кровопотери в ретроспективной группе, при ЕР был 1223,04±43,2мл, при КС был в среднем 1199,12±52,1 мл.

При анализе причин кровотечений было установлено, что частыми причинами кровотечений явились: ПОНРП 3,3%, атония матки 28,9%, дефекты последа 9,5%, травмы 11,4%, изменения в системе гемостаза 54,7%. В некоторых случаях отмечались сочетанные причины ПК.

Для лечения ПК проводили медикаментозное и хирургическое вмешательство (таб.1).

Таблица 1.

Методы остановки кровотечения (по данным ретроспективной группы)

Количество больных	Консервативная остановка ПК		Хирургическое остановка ПК	
171 – 100 %	158	92,4%	13	7,6%

Как видно из таблицы консервативная остановка ПК составил 92,4 %, хирургическая 7,6% случаев.

Перед нами встал вопрос: Какие дополнительные мероприятия могли предотвратить ПК во время родов и в послеродовом периоде? Для ответа на вопрос мы произвели дополнительные методы исследования. Учитывая, что одной из причин ПК является нарушение гемостаза в 54,7 % случаев, мы изучили гемостазиологические показатели как триггерного механизма ПК (таб.2).

Анализ коагулограммы ретроспективной группы (до родов)

Таблица 2.

Показатель (n=171)	**Значение**	**%**
АЧТВ (сек.)	**38,12±4,41**	59,1%
Протромбиновый индекс (%)	**90,6±7,47**	62,5%
Фибриноген (г\л)	**4,1±0,91**	57,3%
Протромбиновое время (сек.)	**14±0,2**	53,8%
МНО	**1,83±0,1**	67,2%

Как видно из таблицы, почти 50% случаев имели изменения в системе гемостаза в виде нарушений свёртывания. Это подтверждает вышеизложенные предположения.

У беременных с преждевременными родами уровень протромбина повышается, что свидетельствует о том, что внешний путь свертывания расширился. Улучшение АЧТВ указывает на активизацию внутреннего пути свертывания. Беременные страдают гиперкоагуляционным синдромом, что приводит к преждевременным родам, согласно исследованиям, которые показывают, что повышение уровня фибриногена в сочетании с вышеуказанной активностью процессов свертывания приводит к гиперкоагуляционному синдрому у беременных [1; 5].

Таким образом, основным направлением современного акушерства является изучение нарушений свертывающей системы при беременности и методов ее лечения.

Изучая данные системы гемостаза при патологической кровопотере у преждевременно родивших женщин, можно сделать вывод, что изучение биохимических маркеров системы гемостаза недостаточно, и что дисфункция эндотелия может играть роль в возникновении этих осложнений. Разработка эффективных методов лечения гиперкоагуляционного синдрома у беременных на ранних сроках также поможет предотвратить преждевременные роды.

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SUT BEZI RAKI GORMONAL TERAPIYASIDA ESTROGEN GORMON SINTEZINI TO’XTATISH ORQALI DAVOLASH SAMARADORLIGINI OSHIRISH

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ANNOTATSIYA

Maqolada ko'krak bezi saratoni bilan og'rigan bemorlarda tamoksifen bilan taqoslanganda aromataza ingibitorlari bilan o'tkazilgan adyuvant gormon terapiyasining samaradorligini baholash natijalari keltirilgan. Taqoslangan bemorlar guruhlarida residivssiz yashash ko’rsatgichi va kasallikning qaytalanish xavfi nisbati baholandi.

Kalit so'zlar: ko'krak bezi saratoni, gormon terapiyasi, aromataza ingibitorlari, tamoksifen.

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УЛУЧШЕНИЕ ЭФФЕКТИВНОСТИ ГОРМОНОТЕРАПИИ БОЛЬНЫХ РАКОМ МОЛОЧНОЙ ЖЕЛЕЗЫ ПУТЕМ БЛОКАДЫ СИНТЕЗА ЭСТЕРОГЕНОВ

АННОТАЦИЯ

В статье представлены результаты по оценке эффективности адъювантной гормона терапии, проводимой ингибиторамы ароматазы в сравнении с тамоксифеном больным раком молочной железы. Оценены безрецидивная выживаемость, отношение рисков возврата болезни в сравниваемых группах больных.

Ключевые слова: рак молочной железы, гормон терапия, ингибиторы ароматазы, тамоксифен.

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IMPROVING THE EFFECTIVENESS OF HORMONE THERAPY IN BREAST CANCER PATIENTS BY BLOCKING ESTROGEN SYNTHESIS

ANNOTATION

The article presents the results of the evaluation of the effectiveness of adjuvant hormone therapy, conducted with aromatase inhibitors in comparison with tamoxifen in patients with breast cancer. Relapse-free survival, the risk ratio of disease recurrence in the compared groups of patients are estimated.

Key words: breast cancer, hormone therapy, aromatase inhibitors, tamoxifen.

Esterogen gormoniga sezgir sut bezi o‘smalarida gormonoterapiya asosiy davolash usullaridan biridir. Tamoksifen preparati 1971 yilda tavfsiya qilingan bo‘lib, hozirgacha sut bezi rakini ad'yuvant gormon terapiyasida, hamda sut bezi rakini tarqalgan disseminatsiya holatlarida davolash uchun asosiy preparat bo‘lib qolmoqda [2,4,6].

Hozirgi vaqtda sut bezi rakini gormonal davolashda klinik amaliyotga ko‘plab dori vositalari kirib kelmoqda. Bularga ikkinchi va uchinchi avlod aromataza ingibitorlari, yangi avlod antiestrogenlar, estrogen retseptorini regulyatorlari, molekulyar onkologiya yutuqlari natijasida siklinga bog‘liq kinazalar ingibitorlari 4/6 va hakozalar kiradi.

Sut bezi o‘smalarining paydo bo‘lishi va rivojlanishida ko‘plab omillar orasida eng muhimi endokrin muvozanatning nomutanosibligi hisoblanadi. Sut bezi raki bilan og‘rigan bemorlarda o‘smani o‘sishi, metastazlar berishishi va tarqalishida asosiy omil sifatida tuxumdonlarda, qisman buyrak usti bezlarida, shuningdek, yog‘, suyak va mushak to‘qimalarida sintez qilinadigan estrogenlardir [1,2,5].

Ayollarda jinsiy gormonlar hosil bo‘lishida asosiy ferment aromataza hisoblanadi. Aromataza sut bezi o‘smasining o‘zida hamda, mushak, yog va jigar to‘qimalarda ham aniqlanadi [4,5,12].

Aromataza fermenti sut bezi rakini gormonal davolashda ishlatiladigan preparatlar - aromataza ingibitorlari uchun farmakologik “nishon” hisoblanadi. Bu preparatlarning ta'sir qilish mexanizmi sitoxrom R-450 bir nechta fermentlarini, shu jumladan aromatazani inaktivatsiya qilishdan iborat. Aromatazaning inaktivatsiyasi esterogen gormoni hosil bo‘lishini kamayishiga olib keladi, natijada sut bezi raki o‘sishi, rivojlanishi to‘xtatiladi va o‘smani o‘zi va metastazlarida regressiya kuzatiladi.

Hozirda sut bezi rakini gormonga moyil turlarini davolashda eng ko‘p o‘rganilgan va klinik amaliyotda qo‘llaniladigan preparatlar: anastrozol 1mg (Arimideks), letrozol 2,5mg (Femara) va eksemestan 25mg (Aromazin) dori vositalari hisoblanadi. Ushbu preparatlar selektiv ta'sirga ega bo‘lib, faqat aromatazaga ta'sir qiladi va buyrak usti bezlari funktsiyasini buzilishiga olib kelmaydi [3,5,9].

Letrozol sutkada 2,5mg berilganda sut bezi raki bilan postmenopauzadagi ayollarda aromatizatsiya jarayonini 80% dan ko‘proq darajada to‘xtatadi. Ko‘p qirrali tadqiqotlar shuni ko‘rsatadiki, letrozol bilan davolangan bemorlarda, tamoksifen qabul qilgan bemorlarga qaraganda, sut bezi raki rivojlanish xavfi sezilarli darajada past bo‘lgan va bemorlarni yashovchanligi tamoksifen guruhiga qaraganda ancha yuqori bo‘lgan [7].

Anastrazol 1mg (Arimideks) ham klinik amaliyotda keng qo‘llaniladi. Anastrozol 24 soat davomida estradiol sintezi darajasini tez pasayishiga olib keladi. Shu bilan birga, estradiol sintezi darajasini eng past qiymatlarda doimiy va stabil pasayib turishini ta'minlaydi[10].

Keyingi preparat, eksemestan 25mg (Aromazin), juda ko‘p o‘rganilgan va metastatik sut bezi rakida qo‘llaniladi. Periferik to‘qimalarda va o‘smaning o‘zida aromataza faolligini to‘liq to‘xtatib qo‘yadi. Eksemestan ikkinchi liniyadagi terapiyada femara va arimideksdan foydalangandan keyin ham samarali samarali natijalar beradi [11,13].

Shunday qilib, periferik to‘qimalarda va o‘smaning o‘zida aromataza fermentini faolligini to‘xtatish uchun aromataza ingibitorlarini qo‘llash natijasida estrogen ishlab chiqarishni kamaytirish menopauzadagi ayollarda gormonga moyil sut bezi rakini davolashda ratsional yondashuv hisoblanadi [5,8,9].

Tadqiqot maqsadi: aromataza ingibitorlari samaradorligini estrogen gormonlar sintezini to‘xtatish orqali sut bezi raki ad'yuvant gormon terapiyasida antiesterogen tamoksifen preparati bilan taqoslash.

Tadqiqot materiallari va usullari: Tadqiqot Respublika ixtisoslashtirilgan Onkologiya va Radiologiya Ilmiy-Amaliy Tibbiyot Markazi Samarqand filialida 2021 yildan 2024 yilgacha davolangan 300 nafar bemorlarni kasallik tarixi va dispanser kuzatuvi ambulator kartalari ma’lumotlariga asoslandi. Tadqiqotga esterogen gormonlarga ijobiy retseptorlarga ega bo‘lgan statusdagi 300 ta operatsiyadan keyingi postmenopauzadagi sut bezi raki bilan bemorlar ishtirok etdi. Barcha bemorlarga o‘smani trepan biopsiyasi va morfologik tekshiruvlar o‘tkazildi, shuningdek, rak jarayonning differentsiatsiya darajasi baholandi (G-gradatsiyasi). Tadqiqotga qatnashgan ayollar 46 yoshdan 85 yoshgacha bo‘lgan. Bemorlarning o‘rtacha yoshi 65,5 yoshni tashkil etdi.

Barcha bemorlar klinik, laborator, UZD, mamografiya, morfologik tekshirishlardan o‘tqazilib, kasallikni bosqichlari (TNM) qo‘yilgandan keyin birinchi etapda jarrohlik amaliyoti: radikal mastektomiya; kvadrantektomiya limfadissektsiya bilan (qo‘ltiq osti - o‘mrov osti - kurak osti) bajarildi. Ikkinchi etapda radioterapiya: sut bezlari va regionar metastaz joylarini nurlantirish gamma-terapevtik apparat yordamida amalga oshirildi. Operatsiyadan so‘ng radioterapiya regionar metastaz joylariga bir martalik doza - 2Grey; Umumiy dozada - 50Grey o‘tqazilgan. Organ saqlovchi jarrohlik amaliyoti o‘tkazgan bemorlarga, sut beziga umumiy dozasi - 50 Greygacha nur berilgan.

O‘smadagi gormon retseptorlar holati immunogistoximiyaviy tekshirishlarda ijobiy natijalar olingandan so‘ng, bemorlar ikki guruhga ajratildi.

Birinchi guruhga klassik standart antiestrogen gormoni tamoksifen ad'yuvant rejimda kuniga 20 mg dozada berildi; Ikkinchi guruhdagi bemorlarga antiestrogen gormonlar aromataza ingibitorlari: anastrozol (Arimidex) 1 mg yoki letrozol (Femara) 2,5 mg yoki eksemestan (Aromazin) kuniga 25mg berildi. Bemorlar dori vositalarini yashash joyida ambulatoriya sharoitida qabul qilishdi.

Birinchi guruhdagi bemorlarning yoshi: 49 yoshdan 84 yoshgacha, o‘rtacha ko‘rsatkich - 67,9 yosh. Ikkinchi guruhdagi bemorlarning yoshi: 46 dan 85 yoshgacha, o‘rtacha ko‘rsatkich 66,5 yosh. Bemorlar guruhlari o‘rtasida yosh bo‘yicha statistik jihatdan ahamiyatli farqlar qayd etilmadi. Ikkala guruhdagi yosh ko‘rsatgichi normal taqsimot qonuniga mos keladi (birinchi guruhda: $p = 0,21$; ikkinchi guruhda: $p = 0,17$, Shapiro-Uilk mezoni). Parametrik Stьyudent mezoni qo‘llanilishini ikkinchi sharti - umumiy dispersiya bajarilgan, $p > 0,05$, Fisher mezoni. Guruhlardagi taqsimotlarni yoshga qarab solishtirish: $p = 0,12$ (Stьyudent mezoni). Taqqoslangan guruhlardagi bemorlarda sut bezi raki jarayonining bosqichlar darajasiga qarab taqsimlanishi 1 - jadvalda keltirilgan.

Jadval.1.

Bemorlarda sut bezi rakini bosqichlar darajasida taqsimlanishi

Bosqich	Tamoksifen	Aromataza ingibitorlari
I	47	37
IIa	54	55
IIb	21	24
IIIa	4	2
IIIb	24	32

Jami	150	150

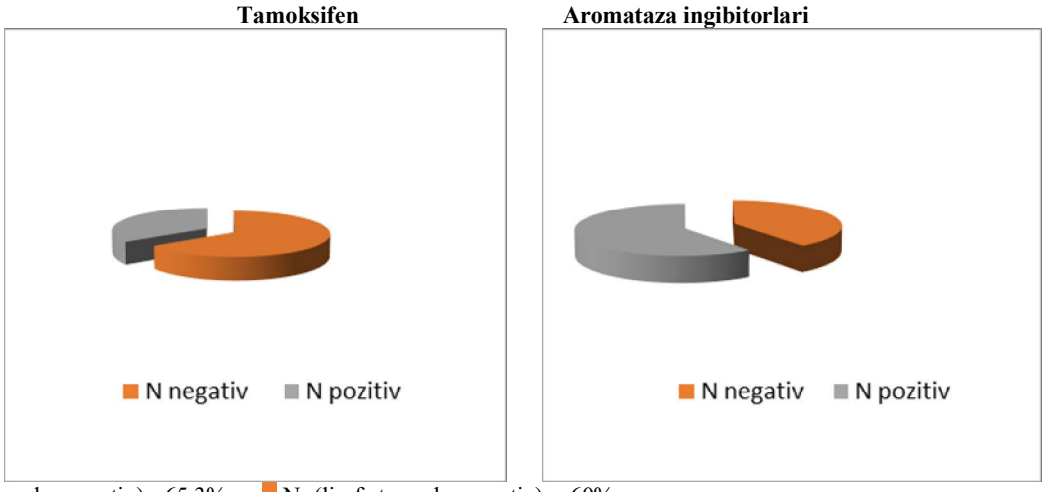
Bosqichlar o‘rtasida statistik jihatdan muhim farqlar yo‘q (p = 0,52).

Operatsiyadan so‘ng o‘smalarning gistologik tekshiruvi o‘tkazilgan. Rak jarayonini differentsiatsiyasi (G-gradatsiya) darajasi va regionar limfa tugunlardagi metastazlar xususiyati aniqlandi. Tamoksifen guruhida 21 (14%) bemorda birinchi (G1); 93 (62%) bemorda ikkinchi (G2) va 36 (24%) bemorda uchinchi (G3) gistologik differentsiatsiya darajasi kuzatildi. Aromataza ingibitorlari guruhida G1 gradatsiyasi 16 (10,7%) bemorda, G2 gradatsiyasi 93 (62%) bemorda va G3 gradatsiyasi 41 (27,3%) bemorda aniqlandi. Tadqiqotga kiritilgan bemorlar guruhlari o‘rtasida "rak jarayonining differentsiatsiyasi darajasi" mezonga ko‘ra (p=0,61, x2 mezoni) statistik jihatdan farqlanmadi.

Ad'yuvant maqsadda tamoksifen olgan 72 (48%) bemorda hosila o‘ng sut bezida joylashuvi qayd etild; 78 (52%) bemorda hosila chap sut bezida joylashgan.

Aromataz ingibitorlari bilan davolangan 84 (56%) bemorlarda rak o‘simtasi o‘ng sut bezida, 66 (44%) bemorda – chap chap sut bezida joylashgan. Ushbu mezon bo‘yicha guruhlar ham solishtirilganda: p=0,20, x2 statistik jihatdan farqlar aniqlanmadi.

Muhim prognostik belgilardan biri regionar limfa tugunlarda metastazlarning mavjudligidir. Tadqiqotimizda regionar limfa tugunlarining holatiga qarab bemorlarning taqsimlanishi (1-rasm).



N- (limfa tugunlar negativ) - 65,3%
N+ (limfa tugunlar pozitiv) - 34,7%
N- (limfa tugunlar negativ) - 60%
N+ (limfa tugunlar pozitiv) - 40%

Rasm.1. Regionar limfa tugunlarining holatiga qarab bemorlarning taqsimlanishi.

Tamoksifen qabul qilgan guruhda 52 (34,7%) bemorda pozitiv - metastaz limfa tugunlarda kuzatildi, 98 (65,3%) bemorda negativ - limfa tugunlarda metastaz kuzatilmadi. Aromataza ingibitorlari qabul qilgan guruhda 60 (40%) bemorda pozitiv - limfa tugunlarda metastaz borligi, 90 (60%) bemorda negativ - metastaz aniqlanmadi. Ushbu ko‘rsatkich bo‘yicha guruhlar o‘rtasida statistik jihatdan farqlar aniqlanmadi (p=0,40, x2).

Shunday qilib, o‘rganilayotgan bemorlarning guruhlari quyidagi asosiy mezonlarga ko‘ra: bemorlarni yoshi, kasallikning bosqichi, o‘smaning differentsivtsiya darajasi va regionar limfa tugunlarning zararlanishiga qarab taqqoslanishi mumkin.

Tadqiqot natijalari va ularni muhokamasi. Bemorlarning o‘rtacha kuzatuvi 29,8 va 32,6 oyni tashkil etgan, mos ravishda (p>0,05). Kuzatish davrida tadqiqot guruhlaridagi bemorlarda kasallikning qaytalanish belgilari (retsidivlar) qayd etildi. Tamoksifen ad'yuvant maqsadda qabul qilgan bemorlarda 25 (16,7%) holatda o‘smaning progresiyasi kuzatildi. 2-jadvalda birinchi guruhdagi bemorlarda metastazlarning qayd qilinishi to‘g‘risidagi ma'lumotlar keltirilgan.

Jadval 2.

Ad'yuvant maqsadda tamoksifen qabul qilgan bemorlarda metastazlanish xususiyatlari

Metastazlar	Absoluyt son	%
Vitseral organlarga	9	36
Yumshoq to’qimalarga	12	48
Suyaklarga	1	4
Yumshoq to’qimalar va Vitseral organlarga	1	4
Vitseral organlar va suyaklarga	2	8
Jami	25	100

Shunday qilib, bemorlarning aksariyatida yumshoq to‘qimalarda metastazlar, shuningdek, ichki organlarning zararlanishini namoyon bo‘ldi. Suyak va vistseral metastazlarning kombinatsiyasi faqat 2 ta bemorda qayd etildi.

Ad'yuvant maqsadlarda aromataza ingibitorlarini qabul qilgan bemorlarda progressiya faqatgina 12 (8%) bemorda kuzatildi. 3-jadvalda ikkinchi guruhdagi bemorlarda rivojlangan metastazlar to‘g‘risidagi ma'lumotlar keltirilgan.

Jadval 3.

Ad'yuvant maqsadda aromataza ingibitorlari qabul qilgan bemorlarda metastazlanish xususiyatlari

Metastazlar	Absoluyt son	%
Vitseral organlarga	4	33,3
Yumshoq to’qimalarga	2	16,7
Suyaklarga	1	8,3

Suyaklar va yumshoq to'qbmalarga	2	16,7
Yumshoq to'qimalar va Vitseral organlarga	2	16,7
Vitseral organlar va suyaklarga	1	8,3
Jami	12	100

Bemorlarning ko'pchiligida vistseral metastazlar tashxisi qo'yilgan. Faqat 2 bemorda operatsiyadan keyingi chandiq sohasida mahalliy retsidiv paydo bo'lgan.

Shunday qilib, aromataza ingibitorlari operatsiya qilinadigan sut bezi raki bilan bemorlarda uzoq metastazlar va mahalliy retsidivlar sonini statistik jihatdan sezilarli (p = 0,035) kamaytirishga imkon beradi: 150 dan 12 (8%) va 150 dan 25 (16,7%) (2-3 jadvalga qarang).

Kasalliksiz yashovchanlik Kaplan-Meyer usuli yordamida baholandi. Ikki turdagi ad'yuvant gormon terapiyasini olgan bemorlar guruhlarida yashovchanlikni taqoslash uchun logarifmik test qo'lanildi [14,15]. Faqat kuzatish davri davomida dastlab belgilangan sxema bo'yicha davolangan bemorlar haqidagi ma'lumotlar hisobga olindi.

Ad'yuvant maqsadlarda tamoksifen qabul qilgan bemorlar guruhida 14 bemorda uning ta'siridan kelib chiqqan jiddiy nojo'ya asoratlar rivojlanishi sababli preparat to'xtatildi. Aromataza ingibitorlari guruhida hech bir bemorda nojo'ya ta'sir tufayli preparatni qabul qilish to'xtatilmadi. 4-jadvalda taqqoslangan guruhlardagi bemorlarning retsidivsiz yashovchanligi to'g'risidagi ma'lumotlar keltirilgan.

Jadval 4.

Bemorlarning retsidivsiz yashovchanligi

Guruhlar	Bemor Soni	Yashovchanlik (%), +/- (%)					
		1 yil		2 yil		3 yil	
Tamoksifen	136	94,1	2,	87,2	2,9	75,6	4,3
Aromataza ingibitorlari	150	96,7	1,	93,9	2,0	86,5	3,1

Bemorlar guruhlarini taqqoslash natijasida aromataza ingibitorlari guruhida sut bezi raki bilan og'rigan bemorlarning 3 yillik retsidivsiz yashovchanligi tamoksifen guruhiga qaraganda statistik jihatdan sezilarli darajada (c = 0,012) yuqori ekanligi aniqlandi.

Biz tomondan, shuningdek, tamoksifen bilan antiestrogen terapiya va aromataza ingibitorlari bilan estrogen sintezini to'xtatishda paytida kasallik qaytalanishining nisbiy xavfi o'rganildi.

Ad'yuvant maqsadlarda tamoksifen olgan bemorlar guruhida kasallik progressiyasining nisbiy xavfi 2,5 baravar yuqori ko'rsatkichni tashkil qildi (5-jadval).

Jadval 5.

Kasallik progressiyasini nisbiy xavfi

Nisbiy xavf	95% ishonchli interval	P
2,48	1,25-4,94	0,010

Tamoksifen qabul qilgan guruhda mahalliy retsidiv rivojlanishini nisbiy xavfi ham yuqori edi (6-jadval).

Jadval 6.

Mahalliy retsidivlar nisbiy xavfi

Nisbiy xavf	95% ishonchli interval	P
5,96	1,31-27,2	0,021

Eksemestan (Aromazin) qabul qilgan guruhdagi uzoq metastazlarning nisbiy xavfi tamoksifen guruhidagi bilan taqoslanganda statistik jihatdan farqlar aniqlanmadi,

7-jadval.

Jadval 7.

Uzoq metastazlar paydo bo'lish nisbiy xavfi

Nisbiy xavf	95% ishonchli interval	P
1,79	0,84-3,82	0,13

Ushbu metodikani onkologik muassasalar klinik amaliyotida keng qo'llash sut bezi raki bilan bemorlarni davolash natijalarini sezilarli darajada yaxshilash mumkin bo'ladi.

Xulosalar

1. Sut bezi raki bilan bemorlarni ad'yuvant gormon terapiyasida aromataza ingibitorlarini qo'llash, antiestrogen terapiya - tamoksifen bilan taqoslaganda retsidivlar va uzoq metastazlarni statistik jihatdan sezilarli darajada kamaytirishga imkon beradi: mos ravishda 8% va 16,7%.

2. Aromataza ingibitorlari qabul qilgan guruhdagi bemorlarda mahalliy retsidivlarning rivojlanish nisbiy xavfi tamoksifen qabul qilgan guruhga nisbatan statistik jihatdan sezilarli darajada past.

3. Aromataza ingibitori va tamoksifen qabul qilgan guruhlarda uzoq metastazlarning rivojlanishi nisbiy xavfi statistik ahamiyatga ega emas.

4. Aromataza ingibitorlari qabul qilgan guruhdagi bemorlarda kasallikning qaytalanishining nisbiy xavfi (uzoq metastazlar va mahalliy retsidivlar) tamoksifen guruhiga qaraganda statistik jihatdan sezilarli darajada past.

5. Sut bezi raki bilan bemorlarni ad'yuvant gormonal terapiyasida aromataza ingibitorlari va antiesterogen tamoksifen preparati bilan taqoslaganda, aromataza ingibitorlari 3 yillik retsidivsiz yashovchanlikni statistik jihatdan sezilarli darajada oshirish imkonini beradi.

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BOLALARDA COVİD-19 FONIDA RIVOJLANGAN O'TKIR PYELONEFRITNING TAHLILLIK ASPEKTLARI

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ANNOTATSIYA

Buyrak patologiyasi ko'proq yosh bolalarda va yuldosh kasalliklarda uchraydi. Tadqiqotning maqsadi. Bolalarda COVID-19 fonida va usiz rivojlangan o'tkir pielonefritning (O'P) klinik va laborator mezonlarining xususiyatlarini aniqlash va baholashdan iborat. Usullari. O'tkir pielonefrit bilan og'rigan 65 bolani kuzatuvchi kohort retrospektiv klinik tadqiqoti o'tkazildi. Natijalar va muhokama. O'P bo'lgan bolalarda quyidagi asosiy klinik belgilar aniqlandi: intoksikatsiya belgilari fonida 90% (27) va 100% (35) bolalarda isitma. Xulosa. Biz kasallikning klinik belgilari Covid-19 bo'lgan bemorlarda aniqroq ekanligini aniqladik, bu buyrak yallig'lanishi, qon tomirlari o'tkazuvchanligining oshishi, suyuqlik yo'qotilishi, qorin bo'shlig'i gipertenziyasi, gipovolemiya va keyingi shok. natijasida kelib chiqadigan o'tkir buyrak patologiyasida sezilarli intoksikatsiya mavjudligi bilan bog'liq.

Kalit so'zlar: COVID-19, o'tkir pielonefrit, siydikning bakteriologik profili.

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АНАЛИТИЧЕСКИЕ АСПЕКТЫ ОСТРОГО ПИЕЛОНЕФРИТА НА ФОНЕ COVID-19 У ДЕТЕЙ

АННОТАЦИЯ

Ренальная патология чаще встречалась у детей младшего возраста и у лиц с сопутствующими заболеваниями. Цель исследования — определить и оценить особенности клинико-лабораторных критерий острого пиелонефрита (ОП) у детей, развившегося на фоне COVID-19 и без него. Методы. Проведено обсервационное когортное ретроспективное клиническое исследование 65 детей с острым пиелонефритом. Результаты и обсуждение. У детей с ОП определены следующие основные клинические симптомы: лихорадка фебрильного характера у 90% (27) и у 100% (35) детей на фоне симптомов интоксикации. Заключение. Мы определили, что клинические признаки заболевания были более выраженными у больных имевших в анамнезе Covid-19, что связано с наличием более значимой интоксикации при острой почечной патологии возникающей из-за воспаления почек, повышенной проницаемости сосудов, потери жидкости, внутрибрюшной гипертензии, гиповолемии и последующего шока.

Ключевые слова: COVID-19, острый пиелонефрит, бактериологический профиль мочи.

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ANALYTICAL ASPECTS OF ACUTE PYELONEPHRITIS WITH COVID-19 IN CHILDREN

ABSTRACT

Renal pathology was more common in young children and in individuals with concomitant diseases. The aim of the study was to determine and evaluate the features of clinical and laboratory criteria for acute pyelonephritis (AP) in children that developed against the background of COVID-19 and without it. Methods. An observational cohort retrospective clinical study of 65 children with acute pyelonephritis was conducted. Results and discussion. The following main clinical symptoms were identified in children with AP: febrile fever in 90% (27) and in 100% (35) of children against the background of intoxication symptoms. Conclusion. We found that clinical signs of the disease were more pronounced in patients with a history of Covid-19, which is associated with the presence of more significant intoxication in acute renal pathology arising from kidney inflammation, increased vascular permeability, fluid loss, intra-abdominal hypertension, hypovolemia and subsequent shock.

Key words: COVID-19, acute pyelonephritis, urine bacteriological profile.

O'tkir COVID-19 infektsiyasidan so'ng buyrak gistopatologiyasi bo'lgan kattalardagi epidemiologiya, patofiziologiya, xavf omillari va prognoziga oid ma'lumotlar hozirda yaxshi tasdiqlangan bo'lsa-da, o'tkir COVID-19 infektsiyasidan keyin bolalarda endogen buyrak patologik ko'rinishlarini o'rganishda sezilarli bo'shliq saqlanib qolmoqda [1, 3].

Bir qator Evropa mamlakatlari ma'lumotlari erkaklar va ayollar o'rtasida teng miqdordagi kasalliklarni ko'rsatdi, ammo erkaklarda og'irroq holatlar mavjud [2, 4].

Dong Y, Mo X, Xu Y, Qi X, Jiang F, Jiang Z tomonidan 287 nafar bemorda o‘tkazilgan tadqiqotlar natijalari shuni ko‘rsatdiki, Xankou kasalxonasiga yotqizilganlar, Uxan, Xitoy, COVID-19 bilan kasallangan bemorlarda o’tkir buyrak yetishmovchiligi (O’BY) bilan kasallanish (19,6%) va O’BY bo‘lmagan bemorlarga nisbatan o‘lim xavfi sezilarli darajada oshgan [16]. Bu, shuningdek, omon qolish va buyrak funktsiyasi o'rtasidagi muhim korrelyatsiyani ko'rsatadi [7, 8].

Tadqiqotning maqsadi bolalarda COVID-19 fonida va usiz rivojlangan o'tkir pielonefritning (O’P) klinik va laboratoriya mezonlarining xususiyatlarini aniqlash va baholashdan iborat.

Materiallar va tadqiqot usullari. O'tkir pielonefrit bilan og'rigan 65 bolani kuzatuvchi kohort retrospektiv klinik tadqiqoti o'tkazildi. Shuningdek, tadqiqotda 20 nafar sog'lom bola nazorat guruhi sifatida tekshirildi. Bemorlar O‘zbekiston Respublikasi Sog‘liqni saqlash vazirligiga qarashli “Samarqand viloyati ko‘p tarmoqli bolalar tibbiyot markazi” Davlat byudjeti sog‘liqni saqlash muassasasi nefrologiya bo‘limida kuzatildi.

Tadqiqotning laborator tekshiruvlari O‘zbekiston Respublikasi Sog‘liqni saqlash vazirligining “Samarqand viloyat ko‘p tarmoqli bolalar tibbiyot markazi” davlat sog‘liqni saqlash muassasasi klinik diagnostika laboratoriyasi, “Innova” klinikasi laboratoriyasi hamda O‘zbekiston Respublikasi Sog‘liqni saqlash vazirligi Immunologiya va inson genomikasi instituti markaziy ilmiy-tadqiqot laboratoriyasi hamda «G’unchamed» ilmiy-tadqiqot laboratoriyasida o’tkazildi. Tekshiruv davri: 2020 yil yanvardan 2023 yil dekabrgacha. Ishtirokchilar COVID-19 anamnezida mavjudligi yoki yo'qligi asosida buyrak asoratlari uchun davolash boshlanishidan oldin turli taqqoslash guruhlariga jalb qilingan. Uchta guruh tuzildi: 1-guruhga COVID-19 anamnezida bo‘lmagan O’P bilan kasallangan 30 nafar bolalar, 2-guruhga COVID-19 fonida O’P bilan kasallangan 35 nafar bemor va 3-guruhga (nazorat guruhi) 20 nafar sog‘lom bolalar kiritilgan. Umumiy klinik siydik tahlili o'tkazildi (proteinuriya (mg / kun), leykotsituriya (ko'rish sohasidagi hujayralar), bakteriuriya (CFU / ml)); Nechiporenko bo'yicha testlar (hujayralar / ml); mikroflora uchun siydik ekmasi (>100 000 xuj./ ml).

Laboratoriya tadqiqotlaridan olingan ma'lumotlar statistik usullar yordamida qayta ishlandi. Hisob-kitoblar Excel (Microsoft Office, 2016, AQSH) va StatPlus 7 versiyasi (AnalystSoft Inc., AQSh) yordamida amalga oshirildi.

Natijalar va muhokama. Bemorlarni tanlash klinik ko'rsatmalarga muvofiq klinik va laboratoriya diagnostikasi asosida o'tkir pielonefrit tashxisini tasdiqlanishini o'z ichiga oladi. Bolalarni guruhlarga bo'lishning diagnostik mezonlari anamnezni o'rganish natijalari, bemorni ob'ektiv tekshirish, klinik va laboratoriya ma'lumotlari (shu jumladan siydikning umumiy tahlili, Nechiporenko testi, patogen aniqlangan bemorlarning siydigining bakterial ekmasi, siydikda leykotsitlarni aniqlash). O'rganilayotgan guruhlardagi bolalarda O’Pning klinik belgisi febril isitma (intoksikatsiya belgilari bilan birgalikda) edi. Ushbu ko'rinishlar siyish ritmidagi buzilishlar bilan birlashtirildi (imperativ chaqiruvlar, pallakiuriya, kamdan-kam siyish), og'riqli siyish. O'rganilayotgan O’P bilan og'rigan bolalarning anamnezida Covid-19 ni aniqlash qon zardobining IFT diagnostikasi yordamida amalga oshirildi, bu IgG (g/l) ning yuqori darajasi aniqlandi, bu anamnezda ushbu patologiyaning mavjudligini va Covid-19 remissiya bosqichining shakllanishini tasdiqladi.

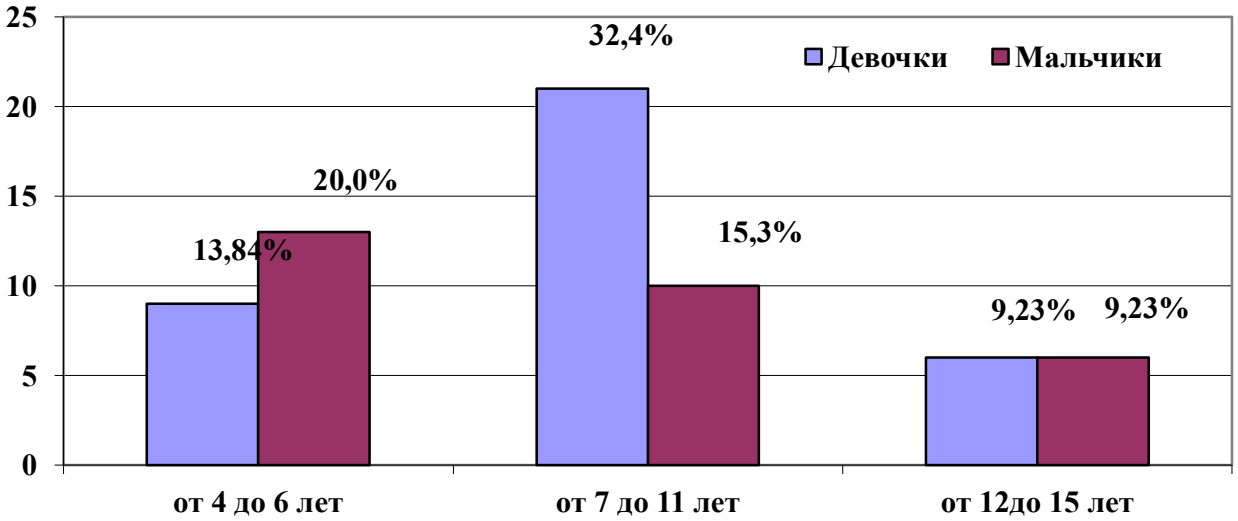
2020-2023-yillarda Samarqand viloyat ko‘p tarmoqli bolalar tibbiyot markazi (SVKBITM) nefrologiya bo‘limida davolanayotgan 65 nafar o‘tkir pielonefrit (O’P) bilan og‘rigan bolalarni kuzatdik.

Bemorlar ikki guruhga bo'lingan. Birinchi guruhga Covid-19 anamnezida bo'lmagan o'tkir pielonefritli (n=65) 30 nafar bola, ikkinchi guruhga esa o'tkir pielonefrit va Covid-19 bilan kasallangan 35 nafar bemor kirdi. Qabul qilingan kundan boshlab anamnezda Covid-19 kasalligining davomiyligi 3 haftadan 2 oygacha bo'lgan.

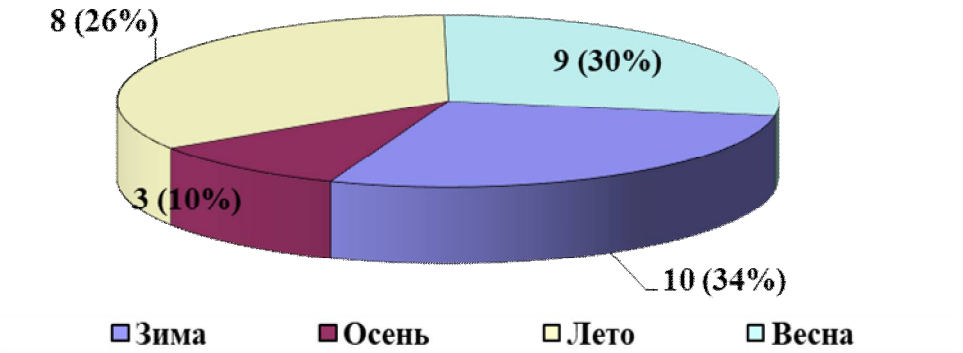
O’P tashxisi nozologiya tasnifiga muvofiq o'rnatildi (Korovina N.A. 2002).

Tadqiqotlarimiz natijalari shuni ko'rsatdiki, O’P bilan og'rigan bemorlarimiz orasida 29 o'g'il (44,6%) va 36 qiz (55,4%) bo'lgan va shuni ta'kidlash kerakki, 4 yoshdan 6 yoshgacha bo'lgan O’P bilan og'rigan 13 (20%) o'g'il bolalar soni 9 (13,84%) qizlar sonidan ustundir. Holbuki, 12 yoshdan 18 yoshgacha bo'lgan 6 (9,23%) o'g'il bolalar (9,23%) va 6 (9,23%) o'g'il bolalar bir xil chastotada uchraydi (1-rasm).

Bizning bemorlarning asosiy kontingenti 7 yoshdan 11 yoshgacha bo'lgan 43 (32,5%) bolalardan iborat (1-rasm), bu yerda bemorlarning ko'pchiligi qizlar 21 (32,4%), o'g'il bolalar esa 10 (15,3%). Yosh guruhlari A.F. Tur tomonidan tavsiya etilgan bolalik davrlarining tasnifi bo'yicha tuzilgan. Qiz/o‘g‘il nisbati 1,24:1 edi.

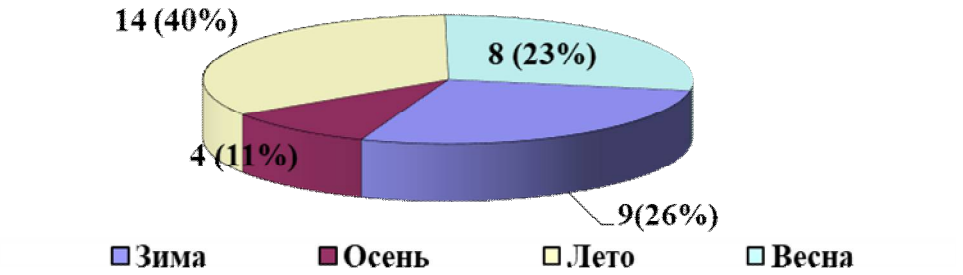


Rasm -1. O'P bilan kasallangan bolalarning yoshi va jinsiga qarab taqsimlanishi



Rasm. 2. O'P bilan kasallangan bemorlarning yil fasllari bo'yicha taqsimlanishi

Covid -19 anamnezida bo'lmagan o'tkir piyelonefritning faol bosqichi bo'lgan bemorlarning kasalxonaga yotqizilish cho'qqisi mavsumga qarab qish-bahor davrida kuzatilgan, bu o'tkir respirator virusli infektsiyalarning tarqalishi, bolaning tanasining gipovitaminozi bilan bog'liq bo'lib, bu yilning shu davriga xos bo'lgan. Kasalxonaga Covid -19 anamnezida o'tkazgan O'Pli bolalar esa ko'proq yoz mavsumida yotqizilgan, bu holat ushbu davrda Covid-19 bilan kasallanish darajasi yuqori bo'lishi bilan bogliq (rasm-3).



Rasm. 3. Covid-19 tufayli o'tkir piyelonefrit bilan kasallangan bemorlarning yil fasllari bo'yicha taqsimlanishi

Klinik, laboratoriya va funktsional tadqiqot usullari natijalarini tahlil qilish asosida piyelonefritning ikkilamchi shaklining dismetabolik nefropatiya fonida tez-tez uchraganligi (n=42 (64,6%)) aniqlandi. Kasallikning o'tkir kechishi bilan og'rigan bemorlarning atigi 7,7 foizida (5) uning rivojlanishiga sabab bo'lgan sabablar aniqlanmagan, qolgan 27,7% (18) bemorlarda O'Pning birlamchi shakli aniqlangan.

Yallig'lanish jarayonining faollik darajasi tana haroratining ko'tarilishi, umumiy intoksikatsiya, dispeptik hodisalar, dizurik kasalliklar va og'riq sindromi kabi klinik belgilarning og'irligiga qarab belgilanadi. Bemorlarimiz orasida yallig'lanish jarayonining birinchi faolligi aniqlanmagan. Biz O'P bilan og'rigan, kasallikning 1-aktivlik darajasi bilan kasallangan bemorlarni kasalxonaga yotqizmadik, ular ambulator sharoitda davolandilar va shuning uchun umumiy ro'yxatga kiritilmadi, chunki COVID -19 bilan kasallangan bolalar faqat 2 va 3-bosqich faolligiga ega edi.

Bemorlarning 18,5 foizida (12) ikkinchi faollik darajasi, 81,5 foizida (53) uchinchi faollik darajasi aniqlangan. Yallig'lanish jarayonining 2-darajali faolligi kasallikning klinik belgilarining mo"tadil namoyon bo'lishi bilan tavsiflanadi: leykotsitoz (>12x10 / l), chapga siljish bilan neytrofiliya, EChT (>20 mm / soat), C-reaktiv oqsil ++, "siydik sindromi" va buyrak funktsiyasining o'zgarishi aniqlangan.

Patologik jarayonning faolligining 3-darajasi kasallikning aniq klinik belgilari, qondagi doimiy o'zgarishlar (>18x10/l), chapga siljish bilan neytrofiliya, EChT ortishi (>30 mm/soat), C-reaktiv oqsilning ++++ gacha, siydikda sezilarli leykotsituriya, proteinuriya, bakteriuriya, mikrogematuriya va buyraklarning funktsional holatining barqaror buzilishlari bilan tavsiflanadi.

O'P bo'lgan bolalarda quyidagi asosiy klinik belgilar aniqlandi: intoksikatsiya belgilari fonida 90% (27) va 100% (35) bolalarda isitma. Bu alomatlar 33,3% (10) va 48,5% (17) bolalarda 33,3% (9) va 25,7% (10) hollarda dizurik buzilishlar (imperativ chaqiriqlar, pollakiuriya, kam siyish) bilan birga uchragan. Bemorlarning 46,6% (14) va 71% (25) da mos ravishda ichak buzilishi (ich qotishi yoki diareya) kuzatilgan; Bemorlarning 50% (15) va 54% (19) da, mos ravishda, qorin og'rig'i qayd etilgan, biz buni bolaning tanasining intoksikatsiyasi bilan bog'laymiz (1-jadval).

Jadval-1

Etiologik omilga qarab O'Pning klinik belgilari

Shikoyatlar	1- guruh: O'P bolalari (n=30)	2- guruh: O'P bolalari Covid-19 fonida (n=35)
Ekstrarenal		
Bosh og'rig'i	16 (53%)	23 (65,7%)
Zaiflik, charchoq	20 (66,6%)	24 (68,5%)
Dispeptik hodisalar*	14 (46,6%)	25 (71%)
Febril isitma	27 (90%)	35 (100%)
Yomon ishtaha	22 (73,3%)	27 (77%)
Qorin og'rig'i	15 (50%)	19 (54%)
Renal		
Ertalab shishgan ko'z qovoqlari	22 (73%)	28 (80%)
Gipertenziyaga moyillik*	10 (33%)	28 (80%)
Buyrak sohasidagi og'riq*	17 (56,6%)	23 (65,7%)
Siydik chiqarishning buzilishi:	10 (33,3%)	17 (48,5 %)
Imperativ undovlar	10 (33,3%)	17 (48,5 %)
Kamdan-kam hollarda siydik chiqarish	10 (33,3%)	17 (48,5%)
Og'riqli siyish	9 (33,3%)	10 (25,7%)

Eslatma: * – p<0,05, 2-guruh – Covid-19 fonida APli bolalar.

Biz kasallikning klinik belgilari Covid-19ni boshdan kechirgan bemorlarda aniqroq ekanligini aniqladik, bu buyrak yallig'lanishi, qon tomirlari o'tkazuvchanligining oshishi, suyuqlik yo'qotilishi, qorin bo'shlig'i gipertenziyasi, gipovolemiya va keyingi shok natijasida kelib chiqadigan o'tkir buyrak patologiyasida sezilarli intoksikatsiya mavjudligi bilan bog'liq.

O'P bilan kasallangan bolalarning kasallik tarixida Covid-19 ni aniqlash uchun qon zardobining IFA- diagnostikasi o'tkazildi, bu IgG darajasi yuqori bo'lganda, bu kasallik tarixida ushbu patologiyaning mavjudligini va Covid-19 remissiya bosqichining shakllanishini tasdiqlaydi (2-jadval).

Jadval-2

O'tkir pielonefritli bolalarning IFA- diagnostikasi natijalari

Ko'rsatkichlar	Covid-19 fonida O"P bo'lsa (n=35)	
	O'g'illar	qizlar
Immunoglobulin G darajasi, g/l	53,5±13,2 p≤0,001	50,8±15,6 p≤0,001
Sog'lomlarda	17,65±3,97	12,26±4,88

Eslatma: p – O"Pning faol bosqichida o'rganilayotgan ko'rsatkich va sog'lom bolalardagi ko'rsatkich o'rtasidagi farqlarning ishonchliligi.

XULOSA

1. Biz kasallikning klinik belgilari Covid-19 anamnezida bo'lgan bemorlarda aniqroq ekanligini aniqladik, bu buyrak yallig'lanishidan kelib chiqadigan o'tkir buyrak patologiyasida ko'proq sezilarli intoksikatsiya mavjudligi, qon tomirlari o'tkazuvchanligining oshishi, suyuqlik yo'qotilishi, qorin bo'shlig'i gipertenziyasi, gipovolemiya va keyingi shok bilan bog'liq.
2. Covid-19 fonida O'P bilan og'rigan bemorlarning 100 % va Covid-19 anamnezida bo'lmagan O'P bilan kasallangan bolalarning 40 % yallig'lanish jarayoni faolligining uchinchi darajasi qayd etilgan.
3. Covid-19 anamnezida bo'lmagan O'Pning faol bosqichi bo'lgan bemorlarni kasalxonaga yotqizishning eng yuqori darajasi mavsumga qarab qish-bahor davrida kuzatildi, kasalxonaga Covid -19 anamnezida o'tkazgan O'Pli bolalar esa ko'proq yoz mavsumida yotqizilgan, bu holat ushbu davrda Covid-19 bilan kasallanish darajasi yuqori bo'lishi bilan bogliq.

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HOMILADOR AYOLLARDA VITAMIN D YETISHMOVCHILIGI, UNING ASORATLARI HAMDA TAHLILLARI

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ANNOTATSIYA

Vitamin D tanqisligi butun dunyo bo'ylab, ayniqsa homilador ayollar orasida keng tarqalgan muammo hisoblanadi. Ushbu tadqiqotda vitamin D yetishmasligining homiladorlik davridagi salbiy oqibatlari (preeklampsiya, gestatsion diabet, erta tug'ish, homilaning kam vaznli) va ularning oldini olish usullari o'rganildi. Retrospektiv tadqiqot usuli yordamida 300 nafar homilador ayolning vitamin D darajasi, ovqatlanish odatlari va homiladorlik natijalari tahlil qilindi. Natijalar shuni ko'rsatdiki, vitamin D tanqisligi bo'lgan ayollarda asoratlar 2-3 baravar ko'p kuzatilgan ($p<0,01$). Homiladorlikdan oldin va homiladorlik davrida vitamin D miqdorini nazorat qilish, ovqatlanishni optimallashtirish va profilaktik maqsadda vitamin D qabul qilish tavsiya etish bilan xulosalandi.

Kalit so'zlar: Vitamin D, homiladorlik, erta tug'ish, suyak metabolizmi, immunitet, asoratlar.

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ДЕФИЦИТ ВИТАМИНА D У БЕРЕМЕННЫХ, ЕГО ОСЛОЖНЕНИЯ И АНАЛИЗЫ

АННОТАЦИЯ

Дефицит витамина D является распространенной проблемой во всем мире, особенно среди беременных женщин. В данном исследовании изучались негативные последствия дефицита витамина D во время беременности (преэклампсия, гестационный диабет, преждевременные роды, низкая масса тела при рождении) и способы их предотвращения. С помощью метода ретроспективного исследования были проанализированы уровни витамина D, пищевые привычки и исходы беременности у 300 беременных женщин. Результаты показали, что осложнения встречались в 2–3 раза чаще у женщин с дефицитом витамина D ($p < 0,01$). Сделан вывод о том, что рекомендуется контролировать уровень витамина D до и во время беременности, оптимизировать питание и рекомендовать прием витамина D в профилактических целях.

Ключевые слова: Витамин D, беременность, преждевременные роды, метаболизм костной ткани, иммунитет, осложнения.

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VITAMIN D DEFICIENCY IN PREGNANT WOMEN, ITS COMPLICATIONS AND ANALYSES

ABSTRACT

Vitamin D deficiency is a widespread problem worldwide, especially among pregnant women. This study investigated the negative consequences of vitamin D deficiency during pregnancy (preeclampsia, gestational diabetes, premature birth, low birth weight) and methods for their prevention. Using a retrospective study method, vitamin D levels, dietary habits and pregnancy outcomes of 300 pregnant women were analyzed. The results showed that complications were observed 2-3 times more often in women with vitamin D deficiency ($p<0.01$). It was concluded that it is recommended to monitor vitamin D levels before and during pregnancy, optimize nutrition, and take vitamin D for preventive purposes.

Key words: Vitamin D, pregnancy, preterm birth, bone metabolism, immunity, complications.

Vitamin D - bu yog'da eriydigan vitamin bo'lib, asosan quyosh nuri ta'sirida terida ishlab chiqariladi va organizmda kaltsiy-fosfor almashinuvini tartibga soladi. U homilador ayollar uchun ayniqsa muhim, u nafaqat onaning suyak to'qimalarini mustahkamlaydi, balki homilaning skelet tizimining shakllanishida ham hal qiluvchi rol o'ynaydi. Kaltsiferol etishmovchiligi oqibatida immunitetning pasayishi virusli infektsiyalarga moyillikni keltirib chiqaradi. Nafas olish yo'llari zaiflashadi, ularning shikastlanishida bronxit va

pnevmoniya rivojlanadi. Inson tanasida natriy tuzlari to'planishi mumkin, ularning ortiqcha miqdori qon bosimini oshiradi. Kalsiferol bunga faol ravishda qarshi turadi va uning etishmovchiligi arterial gipertenziyaga tahdid soladi. Vitamin etishmasligi sog'lom uyquga ta'sir qiladi, bemorda kechalari uyqusizlik va buning natijasida kun davomida letargiya va yomon ishlash rivojlanadi. Asab tizimining buzilishi mumkin, kayfiyat o'zgarishi, depressiya kuzatiladi. Bu serotonin ishlab chiqarishning buzilishi bilan bog'liq. Yurak-qon tomir tizimi ishidagi muvaffaqiyatsizliklar: yurak urishi, og'riq, ritmning o'zgarishi, hamda soch to'kilishi va milklardan qon ketishi kuzatilishi mumkin.

Bugungi kunda vitamin D tanqisligi sog'liqni saqlashni global muammosiga aylangan. Ayniqsa, quyosh nuri kam mintaqalarda yashovchi ayollar, butun tanasini yopib yuradigan ayollar (yopiq kiyim kiyadiganlar), semizlik bilan og'riganlar va to'laqonli ovqatlanish odatlariga ega bo'lmagan homilador ayollar yuqorida nazarda tutilgan guruhiga kiradi. Tadqiqotning ahamiyati: Vitamin D tanqisligi homiladorlikdagi asoratlar bilan bog'liqligini aniqlash. Homilador ayollarda vitamin D darajasini oshirishning samarali usullarini taklif qilish. Asosiy simptomlar

Maqsad va vazifalar:

- Homilador ayollarda vitamin D tanqisligining tarqalish darajasini baholash.
- Vitamin D yetishmasligi bilan homiladorlik asoratlari o'rtasidagi bog'liqlikni aniqlash.
- Vitamin D darajasini oshirishning klinik va profilaktik usullarini tavsiya qilish.

Tekshirish usullari

Tadqiqot turi: Kogort usulida retrospektiv tekshirish.

Namuna hajmi: homilador ayolning 300 nafarida tekshirildi (I-trimesterda ro'yxatga olingan). *Guruhlar:* Asosiy guruh (n=150): 25(OH)D <20 ng/mL (tanqislik).

Nazorat guruhi (n=150): 25(OH)D ≥ 30 ng/mL (o'rtacha daraja).

Ma'lumot to'plash usullari

Biokimyoviy tahlillar: Qondagi 25-gidroksivitamin D [25(OH)D] darajasi. Kaltsiy, fosfor, paratireoid gormon (PTH) darajalari.

Klinik kuzatish: Preeklampsiya, gestatsion diabet, erta tug'ish holatlari qayd etildi.

So'rovnomalar: Ovqatlanish odatlari, quyoshga chiqish chastotasi. Statistik tahlil SPSS 26.0 dasturida t-test, ANOVA, x^2-test qo'llanildi. $P<0,05$ statistik ahamiyatga ega deb qabul qilindi.

Natijalar

1. Vitamin D tanqisligining tarqalishi

- Homilador ayollarning 52% (156/300) da vitamin D tanqisligi aniqlangan (<20 ng/mL).
- Eng yuqori tanqislik darajasi qish mavsumida (65%) kuzatildi.

2. Vitamin D tanqisligi va homiladorlik asoratlari

Asorat turi	Tanqislik guruhi (%)	Nazorat guruhi (%)	P qiymati
Preeklampsiya	24%	8%	<0,01
Gestatsion diabet	20%	7%	<0,05
Erta tug‘ish (<37 hafta)	18%	5%	<0,01
Kam vaznli bola (<2500 g)	15%	4%	<0,01

3. Homilaning rivojlanishiga ta'siri Vitamin D tanqisligi bo'lgan guruhda homilaning o'rtacha vazni 2700±300 g, nazorat guruhida esa 3300±250 g ($p<0,001$).

Vitamin D ning homiladorlikdagi ahamiyati

Vitamin D nafaqat suyak metabolizmi uchun muhim, balki immunitet tizimini mustahkamlaydi va yallig'lanishga qarshi kurashadi. Homiladorlik davrida bu vitamin homilaning miya va yurak rivojlanishiga ijobiy ta'sir ko'rsatadi. Shuningdek, u platsenta funktsiyasini yaxshilash orqali homilaning o'sishini qo'llab-quvvatlaydi.

Risk guruhlari Quyidagi guruhdagi homilador ayollarda vitamin D tanqisligi ehtimoli yuqori: Kam quyoshli mintaqalarda yashovchilar. O'ranib kiyinadigan ayollar. Semizlik bilan og'riganlar. Vitamin D ga boy bo'lmagan ovqatlanish odatlariga ega bo'lganlar.

Profilaktika usullari Quyosh nuri: Kuniga 15-20 daqiqa quyoshga chiqish (teriga to'g'ridan-to'g'ri nur tushishi kerak).

Ovqatlanish: Yog'li baliqlar (losos, sardina), tuxum sarig'i, tabiiy sut mahsulotlari, vitamin D qo'shilgan yog'lar iste'mol qilish.

Dori-darmonlar: Homiladorlik davrida kunlik 600-2000 IU vitamin D preparatlari tavsiya etiladi (shifokor ko'rsatmasiga binoan).

Diagnostika Vitamin D darajasini aniqlash uchun qondagi 25(OH)D darajasi o'lchanadi:

Tanqislik: <20 ng/mL.

Yetarli daraja: 30-50 ng/mL.

Ortiqcha daraja: >50 ng/mL.

Global muammolar Vitamin D tanqisligi butun dunyo bo'ylab, ayniqsa kam quyoshli mamlakatlarda keng tarqalgan. Masalan, Osiyo va Yaqin Sharq mamlakatlarida homilador ayollarning 60-80% da vitamin D yetishmovchiligi aniqlangan.

Homiladorlikdan oldingi tashxis Homiladorlikni rejalashtirish davrida vitamin D darajasini tekshirish va kerak bo'lganda to'ldirish homiladorlikdagi asoratlarning oldini olishga yordam beradi.

Ijtimoiy masalalarga ta'siri Vitamin D tanqisligi homiladorlikdagi asoratlar orqali ijtimoiy-iqtisodiy yukni oshirishi mumkin (masalan, erta tug'ilgan bolalarga g'amxo'rlik qilishning qiyinlashishi).

Xulosa

Vitamin D tanqisligi homiladorlikdagi asoratlar (preeklampsiya, gestatsion diabet, erta tug'ish) va homilaning kam vaznli bo'lishi bilan bog'liq. Homilador ayollarning yarmidan ko'pida vitamin D yetishmovchiligi aniqlangan, bu global muammo ekanligini ko'rsatdi.

Tavsiyalar: Homiladorlikning dastlabki bosqichlarida vitamin D darajasini tekshirish.

Profilaktika: Kuniga 15-20 daqiqa quyoshda sayr qilish. Vitamin D ga boy ovqatlar (yog'li baliqlar, mol va qoy jigari, tuxum sarig'i, tabiy sut va sut maxsulotlari, qoraqat, quritilgan anjir, petrushka) iste'mol qilish.

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JINSIY A'ZOLAR PROLAPSINING JARROHLIK DAVOLASHIDA YUZAGA KELADIGAN ASORATLARNI OLDINI OLISH VA ULARNI DAVOLASH

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ANNOTATSIYA

Ushbu ilmiy maqolada Samarqand shahar 3-son tug'ruq majmuasi va Samarqand shahar "Samarqand Doctor Shifo Baxt" xususiy klinikasi ginekologiya bo'limiga murojat qilib kelgan 125 nafar ayollarda uchraydigan jinsiy a'zolar prolapsi (tushishi va chiqib ketishi) holatlari, ularni jarrohlik yo'li bilan davolash usullari hamda bu muolajalar natijasida yuzaga keladigan asoratlarning oldini olish va ularni samarali davolash masalalari yoritilgan. Mavzuda zamonaviy jarrohlik uslublari, ularning afzallik va kamchiliklari, shuningdek, operatsiyadan keyingi reabilitatsiya davri muhim jihatlar sifatida ko'rib chiqilgan. Tadqiqotda ilg'or klinik tavsiyalar, statistik ma'lumotlar va holat tahlillari asosida tayanilgan holda, asoratlarning oldini olishda individual yondashuv va profilaktik choralar muhimligi alohida ta'kidlangan. Ushbu ish amaliy sog'liqni saqlash tizimi mutaxassislari uchun foydali bo'lishi mumkin.

Kalit so'zlar: Jinsiy a'zolar prolapsi, tos a'zolari prolapsi, jarrohlik davolash, operatsiyadan keyingi asoratlar, profilaktika, reabilitatsiya, individual yondashuv, ginekologiya, tos sohasidagi buzilishlar.

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ПРОФИЛАКТИКА И ЛЕЧЕНИЕ ОСЛОЖНЕНИЙ, ВОЗНИКАЮЩИХ ПРИ ХИРУРГИЧЕСКОМ ЛЕЧЕНИИ ПРОЛАПСА ГЕНИТАЛИЙ

АННОТАЦИЯ

В данной научной статье освещены случаи пролапса (опущения и выпадения) половых органов у 125 женщин, обратившихся в родильный комплекс №3 города Самарканда и в гинекологическое отделение частной клиники «Самарканд Доктор Шифо Бахт». Рассматриваются методы хирургического лечения данных состояний, а также меры по профилактике и эффективному лечению возникающих послеоперационных осложнений. В рамках темы подробно анализируются современные хирургические методики, их преимущества и недостатки, а также значимость послеоперационного реабилитационного периода. Исследование основано на современных клинических рекомендациях, статистических данных и анализе клинических случаев. Особое внимание уделяется важности индивидуального подхода и профилактических мероприятий в предупреждении осложнений. Настоящая работа может быть полезной для специалистов практического здравоохранения.

Ключевые слова: Пролапс половых органов, пролапс тазовых органов, хирургическое лечение, послеоперационные осложнения, профилактика, реабилитация, индивидуальный подход, гинекология, нарушения тазового дна.

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PREVENTION AND MANAGEMENT OF COMPLICATIONS ARISING FROM SURGICAL TREATMENT OF GENITAL PROLAPSE

ANNOTATION

This scientific article highlights cases of genital prolapse (descent and prolapse of pelvic organs) observed in 125 women who sought medical care at Samarkand City Maternity Complex No. 3 and the gynecology department of the private clinic "Samarkand Doctor Shifo Baxt." The article discusses surgical treatment methods for these conditions, as well as measures for preventing and effectively managing postoperative complications. The study examines modern surgical techniques, their advantages and disadvantages, and emphasizes the importance of the postoperative rehabilitation period. Based on advanced clinical guidelines, statistical data, and case analyses, the research underscores the significance of individualized approaches and preventive strategies in minimizing complications. This work may be valuable for healthcare professionals in practical medicine.

Key words: Genital prolapse, pelvic organ prolapse, surgical treatment, postoperative complications, prevention, rehabilitation, individualized approach, gynecology, pelvic floor disorders.

KIRISH: Jinsiy a'zolar prolapsi — bu ko'p sababli (polietiologik) kasallik bo'lib, u ayollarning chanoq a'zolari topografiyasining (joylashuvining) o'zgarishi bilan xarakterlanadi. Buning natijasida bemorning mehnatga layoqati pasayadi va hayot sifati yomonlashadi [1; 4; 3]. NHANES (National Health and Nutrition Examination Survey) ma'lumotlariga ko'ra, ayollarning 10 foizida jinsiy a'zolar prolapsining bir necha shakli aniqlanadi [5]. Jinsiy a'zolar prolapsining tarqalish chastotasi turli manbalarga ko'ra 5% dan 76% gacha bo'lgan keng diapazonda farqlanadi [6; 7]. Bunday katta tafovut mamlakatlar o'rtasidagi farqlar bilan izohlanadi, jumladan: aholining yashash darajasi , milliy xususiyatlar [8] va xavf omillarining farqli bo'lishi va yana bir qancha tashqi va ichki omillarga bog`liq.

Aholining global miqyosda qarib borishi jinsiy a'zolar prolapsi bilan kasallanganlar sonining ortishiga olib keladi. 30–39 yoshdagi ayollar orasida bilan kasallanish ko'rsatkichi o'rtacha har 1000ta ayolga 1,7 nafarni tashkil etadi. Ushbu ko'rsatkich 60–69 yoshdagi bemorlar orasida har 1000ta ayolga 13,2 nafargacha oshadi, eng yuqori ko'rsatkich esa 70–79 yosh oralig'ida kuzatilib, 100ta ayolga 18,6 nafarga yetadi [9]. Shuni takidlash joyizki bu statistic ko`rsatgich faqat o`z salomatligi yomonlashganligi sababli tibbiyot muassasalariga murojat qilgan bemorlar o`rtasida aniqlangan.

Muammoning o'rganilganlik darajasi: Oxirgi yillar adabiyotlari tahlili shuni ko'rsatadiki, ichki jinsiy a'zolar prolapsi eng muhim muammolardan biri bo'lib, jarrohlik davolashdan keyingi retsidiv sonining yuqoriligi ayollarning hayot sifatiga va ijtimoiy hayotiga jiddiy ta'sir ko'rsatadi. Ushbu patologiyalarda birlamchi jarrohlik amaliyotidan keyin retsidivlar uchrashi dastlabki 3 yil ichida 33% dan 61,3% gacha kuzatiladi (*Негмаджанов Б.Б., Шавкатов Х.Ш . Жинсий аъзолар пролапси асорати ва рецидиви кузатилган аёлларда жарроҳлик даволашни оптималлаштириш. Автореферат-2022йил.*).

Jarrohlik usuli bilan tuzatish qiyin sanaladigan va klinik amaliyotda juda keng tarqalgan ichki jinsiy a'zolar yetishmovchiligi va qin cho'ltog'ining prolapsi hisoblanadi (Musin I.I. 2017; Chan C.M. 2011). Hozirgi vaqtda qin cho'ltog'ining gisterektomiyadan keyingi prolapsini davolash va oldini olishda ko'plab transvaginal, laparotomik, kombinirlangan hamda sintetik materiallar bilan qin cho'ltog'ini fiksatsiya qilish usullari mavjud. So'nggi vaqtlarda qin cho'ltog'ini fiksatsiya qilishda ko'plab sintetik materiallardan foydalanilmoqda. Sintetik materiallardan foydalanish nafaqat ijobiy natijalar, balki asoratlarning yangi-yangi turlarining paydo bo'lishiga olib kelmoqda (Radzinskiy V.E. 2018).

Chanoq a'zolari prolapsi bilan shug'ullanayotgan ko'plab jarrohlar sintetik materiallar qo'llanilganidan so'ng asoratlarning 5%–35% gacha ko'payganligini ko'rsatmoqdalar (S. Hagen, D. Starc, C. Glazener 2014; Seykina V.A. 2017). Asoratlardan eng ko'p uchraydigani bu qin shilliq qavatining eroziyasi va sintetik material qo'yilgan soha asoratlaridir. Sintetik materiallardan keyingi uzoq muddatli asoratlardan biri bu qin sinexiyasi bo'lib, ya'ni jarohat sohasining to'liq bitmasligi oqibatida giper trofik yaralarning paydo bo'lishiga olib keladi (Gvozdev M.Yu. 2013).

Mamlakatimizda yetuk olimlar tomonidan jinsiy a'zolar prolapsini tashxislash va davolash (Negmadjanov B.B. 2019., Shavkatov X.SH), tarqalishi va bashorat qilishni o'rganish borasidagi tadqiqotlar diqqatga sazovordir. Biroq, davolashning eng maqbul jarrohlik usulini tanlash, asoratlarni oldini olishga qaratilgan jarrohlik amaliyoti ishlab chiqilmagan.

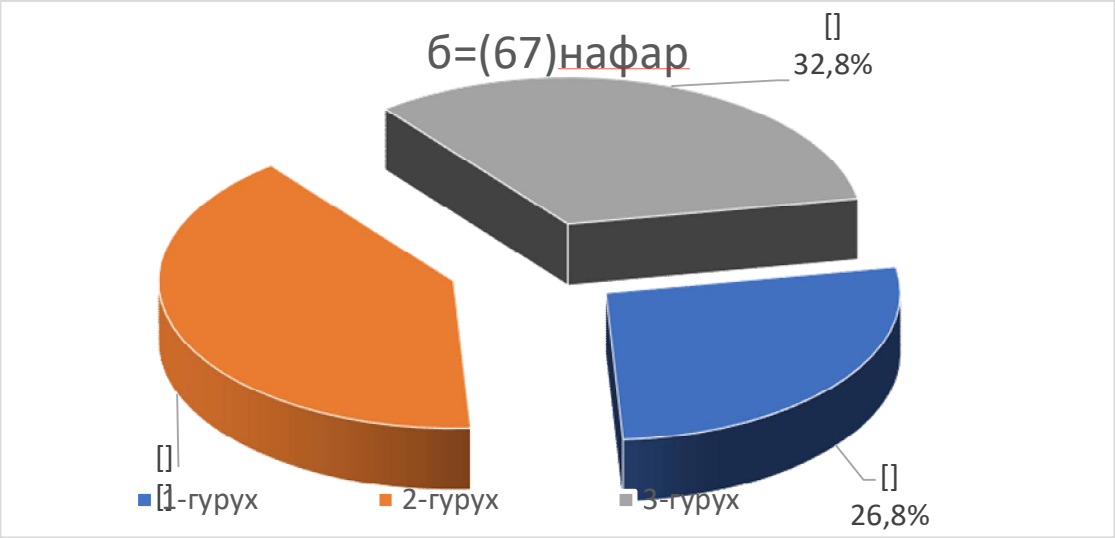
Maqsad: Jinsiy a'zolar prolapsi kuzatilgan ayollarda jarrohlik amaliyotida kuztiladigan asoratlar va residivlarni kamaytirishdan iborat.

Tadqiqot usuli va materiali: Ilmiy tadqiqotimizga genital prolaps bilan murojaat qilgan jami 125 nafar bemor olindi. Bemorlarning yosh ko'rsatkichi 46 dan 68 yoshgacha bo'lgan ko'lamni o'z ichiga oldi, o'rtacha yosh — 55 yosh. Tekshiruvlarimiz davri 2020 yildan 2024 yilgacha bo'lgan 4 yilni tashkil etdi. Tadqiqot o'tkaziladigan barcha bemorlar II guruhga ajratildi: I-guruh (asosiy) — 67 nafar (53,6%) bemorlar. Ular genital prolapsning turli xil asoratlari va birlamchi jarrohlik amaliyotidan keyingi retsidivlari bilan bo'lgan bemorlarni tashkil qiladi.

II-guruh (taqqoslash) — 58 nafar (46,4%) bemor. Ularda jinsiy a'zolar prolapsini bartaraf etishda an'anaviy usulda abdominal va transvaginal jarrohlik amaliyoti bajarilgan.

Tadqiqot natijalari va ularning muhokamasi: Tadqiqot o'tkaziladigan barcha bemorlarimiz ikki guruhga ajratildi. **I-guruh (asosiy)** — 67 nafar (53,6%) bemorlar. Bu guruhga genital prolapsning turli xil asoratlari va birlamchi jarrohlik amaliyotidan keyingi retsidivlari bilan bo'lgan bemorlar kiritilgan. Bu bemorlarda biz taklif qilgan jarroxlik amaliyoti o`tkazilgan. **II-guruh (taqqoslash)** — 58 nafar (46,4%) bemor. Bu bemorlarda jinsiy a'zolar prolapsining og'ir darajalari aniqlangan bo'lib, ularga an'anaviy usulda abdominal va transvaginal jarrohlik amaliyoti bajarilgan.Operativ davolashga ko'rsatmalar sifatida quyidagilar qayd etilgan:Bachadon va qin devorlarining tushishi I–II darajasi bilan 17 nafar (25,3%) bemor;Bachadonning tushishi va chiqib qolishi III–IV darajasi bilan 28 nafar (41,93%) bemor;Jinsiy a'zolar prolapsi va qo'shni a'zolar asoratlari bilan 22 nafar (32,8%) bemor;

Biz tomonidan tadqiqot doirasidagi har ikki guruhda ham kasallikning retsidivlanishi, ya'ni birlamchi jarrohlik amaliyotidan keyingi jinsiy a'zolar prolapsining qaytalanishi va uning yuzaga kelish vaqt oralig'i tahlil qilindi. Biz kasallik retsidivi yuzaga kelish vaqtini quyidagi uchta guruhga ajratdik: **1-guruh** — kasallik retsidivi 1 yildan 3 yilgacha bo'lgan oralig'ida yuzaga kelgan, klinik belgilar "erta" namoyon bo'lgan; **2-guruh** — retsidiv 3 yildan 5 yilgacha bo'lgan davrda paydo bo'lgan, klinik belgilar "sekin" namoyon bo'lgan;Unga ko'ra, bemorlar orasida:1-guruhda 22 nafarida (21,56%) kasallik belgilarining erta namoyon bo'lishi kuzatilgan;2-guruhda bu ko'rsatkich 45 nafar (44,1%) bo'lib, kasallik belgilarining sekin namoyon bo'lishi qayd etilgan; Qolgan 31 nafar (30,38%) bemorda esa kasallik retsidiv ko'rinishi kech namoyon bo'lgan.

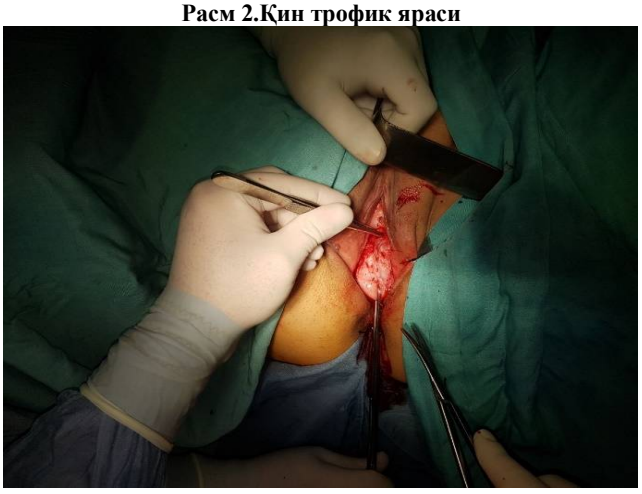


Jinsiy a’zolar prolapsi keyingi bosqichlarida, ya’ni III–IV darajalarida, urogenital va anorektal disfunksiya oqibatida qinning normal topografiyasi va biozenozining buzilishi tufayli yuzaga keladigan jinsiy a’zolar prolapsi va prolaps bilan bog‘liq boshqa qo‘shimcha asoratlar kuzatiladi. Bular qatoriga bachadon bo‘yni yallig‘lanish kasalliklari (servitsit), qin devori va bachadondagi trofik “dekubitus” yaralari kiradi. Bundan tashqari, bachadon bo‘yni elongásiyasi, surunkali endoservitsit yoki bu asoratlarning ikki va undan ortiq holatlarda birgalikda uchrashi ham kuzatilmoqda.

Расм 1.Бачадон “ декубитус” яраси

Расм 2.Қин трофик яраси

Расм 3.Бачадон буйни элонгацияси



Расм 4.Бачадон буйни эндоцервицити

Tadqiqotimiz doirasidagi bemorlar orasida jinsiy a’zolar prolapsiga qo‘shimcha asoratlar o‘rganilganda, asosiy guruhda quyidagi holatlar aniqlandi: 19 nafarida (28,35%) bachadon “dekubitus” yarasi, 21 nafarida (31,34%) bachadon bo‘yni elongatsiyasi, 9 nafarida (13,43%) qin shilliq qavati yaralari, 17 nafarida (25,37%) bachadon bo‘yni yallig‘lanish kasalliklari. Ambulator tayyorgarlik bosqichida bunday bemorlarga odatda turli xil malhamlar va antibiotik terapiya buyuriladi. Shu munosabat bilan, operatsiyadan oldin bemorlarga bir kurs terapevtik davolash muolajalari o‘tkaziladi.

Xulosa: O‘tkazilgan tadqiqotlar shuni ko‘rsatmoqdaki, jinsiy a’zolar prolapsi, ayniqsa uning III–IV darajalari nafaqat anatomik tuzilmalar o‘zgarishi, balki turli klinik asoratlar va hayot sifatining sezilarli darajada pasayishi bilan kechadi. Jarrohlik davolashdan keyingi retsidivlar, ayniqsa sintetik materiallardan foydalanilgan hollarda, bemorlar orasida keng tarqalgan bo‘lib, bu davolash usullarini takomillashtirish zaruratini ko‘rsatadi. Taklif qilingan jarrohlik usuli (qin cho‘ltog‘ini mustahkamlashning takomillashtirilgan modifikatsiyasi asosida bachadonning transvaginal ekstirpatsiyasi) asosiy guruh bemorlarida operatsiyadan keyingi asoratlar va retsidiv

holatlarining kamayishiga xizmat qildi. Tadqiqot natijalari shuni ko‘rsatdiki, ushbu yondashuv yordamida bemorlarning umumiy hayot sifati, ijtimoiy moslashuvchanligi va reproduktiv salomatlik ko‘rsatkichlari ijobiy tomonga o‘zgardi. Shuningdek, operatsiyadan oldin olib borilgan terapevtik tayyorgarlik, ayniqsa yallig‘lanish jarayonlarini bartaraf etishga qaratilgan malham va antibiotik terapiyasi, bemorlarning jarrohlik amaliyotiga tayyorlik darajasini oshirdi hamda kechikkan asoratlar sonini kamaytirdi. Ushbu ilmiy tadqiqot asosida jinsiy a’zolar prolapsining samarali davosi uchun individual yondashuv, mos keluvchi jarrohlik texnika tanlovi va operatsiyadan oldingi to‘g‘ri tayyorgarlik muhim omillar sifatida e’tirof etilishi lozim.

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MUDDATIDAN OLDINGI TUG'RUQ XAVF OMILLARI

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ANNOTATSIYA

Muddatidan oldingi tug'ruq — akusherlikda onalik va perinatal o'lim ko'rsatkichlarini oshiruvchi dolzarb muammo bo'lib, uning erta aniqlanishi profilaktik choralarni ko'rishda muhim o'rin egallaydi. Tadqiqotning maqsadi — homiladorlikning turli bosqichlarida relaksin darajasini hisobga olgan holda, muddatidan oldin tug'ruq xavfini erta prognozlash imkoniyatlarini baholashdir. Tadqiqotda 105 nafar homilador ayol ishtirok etib, ularning klinik va laborator ko'rsatkichlari (TMI, gemoglobin, eritrotsitlar, leykotsitlar, IL-6, ferritin, prolaktin, relaksin) tahlil qilindi. Natijalarga ko'ra, hayz sikli xususiyatlari, somatik va endokrin patologiyalar, shuningdek, relaksin va prolaktin darajalari erta tug'ruq xavfi bilan statistik bog'liqlikda ekanligi aniqlandi. Ushbu omillarni kompleks baholash muddatidan oldin tug'ruqni oldini olishda muhim rol o'ynaydi.

Kalit so'zlar: Erta tug'ilish, xavf omillari, yallig'lanish belgilari, ferritin, interletkin-6, prolaktin, relaksin.

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ФАКТОРЫ РИСКА ПРЕЖДЕВРЕМЕННЫХ РОДОВ

АННОТАЦИЯ

Преждевременные роды являются одной из актуальных проблем акушерства, способствующей увеличению материнской и перинатальной заболеваемости и смертности. Ранняя диагностика данного состояния имеет важное значение для своевременной профилактики. Цель исследования — оценка возможности раннего прогнозирования риска преждевременных родов с учётом уровня релаксина на различных этапах беременности. В исследовании приняли участие 105 беременных женщин, у которых были проанализированы клинико-лабораторные показатели (ИМТ, гемоглобин, эритроциты, лейкоциты, IL-6, ферритин, пролактин, релаксин). Результаты показали достоверную взаимосвязь между данными биомаркерами и риском преждевременных родов. Комплексная оценка этих факторов может служить эффективной диагностической основой для профилактики преждевременных родов.

Ключевые слова: преждевременные роды, факторы риска, воспалительные маркеры, ферритин, интерлейкин-6, пролактин, релаксин.

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RISK FACTORS OF PRETERM BIRTH

ABSTRACT

Early identification of risk factors is crucial for effective prevention strategies. This study aims to assess the potential for early prediction of preterm birth risk by evaluating relaxin levels at different stages of pregnancy. A total of 105 pregnant women participated in the study, with clinical and laboratory parameters analyzed, including BMI, hemoglobin, erythrocytes, leukocytes, IL-6, ferritin, prolactin, and relaxin. The findings revealed a significant correlation between these biomarkers and the risk of preterm birth. A comprehensive assessment of these indicators may serve as a valuable diagnostic tool in the prevention of preterm delivery.

Key words: preterm birth, risk factors, inflammatory markers, ferritin, interleukin-6, prolactin, relaxin.

Kirish: Muddatidan oldin tug'ruqlar zamonaviy tibbiyotda hal etilishi kerak bo'lgan eng dolzarb masalalardan biridir. Bunday tug'ruqlar chaqaloqlar va onalar o'limining yuqori darajasiga sabab bo'ladi va bu butun jamiyatga iqtisodiy va ijtimoiy zarar keltiradi. Muddatidan oldin tug'lishning rivojlanishiga turli omillar, jumladan genetik faktorlar, atrof-muhit omillari va gormonal o'zgarishlar ta'sir qiladi. Erta tug'ilishning sabablarini aniqlash va oldini olish uchun ilmiy tadqiqotlar olib borilmoqda. Bu jarayonlarda yallig'lanish jarayonlari, immun mexanizmlar va gormonlar, xususan, relaksin va prolaktin, katta ahamiyatga ega bo'ladi. Shunday qilib, muddatidan oldin tug'ruqlarni oldini olishning samarali usullarini ishlab chiqish, salbiy reproduktiv oqibatlarni kamaytirishga yordam beradi. Bu tadqiqotlardan ko'rinib turibdiki, muddatidan oldingi tug'ruqni oldini olish uchun samarali usullarni ishlab chiqish, salbiy reproduktiv oqibatlarning chastotasini sezilarli darajada kamaytirishga yordam beradi. Ko'plab ilmiy ishlar erta tug'ilishning sabablarini genom darajasida aniqlashga va progesteronga

yuqori sezuvchanlikni o‘rganishga qaratilgan. Yallig‘lanish bilan bog‘liq gen polimorfizmi, erta tug‘ilishning rivojlanishida eng ko‘p o‘rganilgan va keng ko‘lamli dalillarga ega bo‘lgan omillardan biridir. Immun tizimi mexanizmlari, muddatidan oldin tug‘ilish jarayonini, shu jumladan miometrining kontraktil faolligini oshirishda ishtirok etadi [4, 5]. Ba'zi tadqiqotlar, uyqu buzilishlari va yallig‘lanish reaksiyasining muddatidan oldin tug‘ruqlar rivojlanishidagi ahamiyatini ta'kidlaydi [6, 7]. Hozigi kunda C-reaktiv oqsil, ferritin va relaksin muddatidan oldin tug’ruq xavfini prediktori[13] hisoblanadi. Relaksin, homiladorlik davrida, hayz davrining lutein bosqichidan boshlanib, tug‘ilishgacha bo‘lgan vaqt davomida tartibga soluvchi endokrin funksiyalarni bajaradi. Uning qon zardobidagi eng yuqori kontsentratsiyasi homiladorlikning birinchi trimestrida qayd etiladi va ikkinchi trimestrga o‘tgan sari asta-sekin kamayadi. Relaksinning sut bezlariga ta'siri haqida farazlar mavjud [14, 15], bu esa prolaktin darajasining erta tug‘ilishdagi rolini o‘rganish zaruratini yuzaga keltiradi. Mavjud ilmiy manbalarni tahlil qilish natijasida aniqlanishicha, relaksin va prolaktin gormonlarining erta tug‘ruq rivojlanishiga ko‘rsatadigan birgalikdagi ta’siri hali yetarlicha o‘rganilmagan. Shu munosabat bilan, muddatsiz va o‘z vaqtida tug‘ruq qilgan ayollarning umumiy va reproduktiv anamnezini, irsiyat omillarini, relaksin hamda prolaktin darajalari o‘rtasidagi o‘zaro bog‘liqlikni, shuningdek, ekstragenital va ginekologik kasalliklarning mavjudligini kompleks tarzda o‘rganish dolzarb ilmiy masala hisoblanadi.

Tadqiqotning maqsadi — erta tug‘ruqning muhim diagnostik belgilari va omillarini aniqlash, hamda ularning asosida erta tug‘ilishni oldindan prognozlash imkonini beruvchi matematik modelni yaratish istiqbollarini tahlil qilishdan iborat.

Materiallar va tadqiqot usullari. Mazkur tadqiqot erta yoki vaqtidan oldin tug‘ruq qilgan 105 nafar homilador ayol ishtirokida, korellyatsion va qiyosiy tahlil metodlari asosida amalga oshirildi. Tadqiqotga jalb etish mezonlari quyidagicha belgilandi: 18 yoshdan 45 yoshgacha bo‘lgan, tabiiy yo‘l bilan homilador bo‘lgan ayollar, homiladorlik muddati 22 haftadan 36 hafta 6 kungacha bo‘lgan, tug‘ilishi qog’onoq pufagining muddatidan oldin yorilishi bilan boshlanadigan erta tug‘ruq holatlari yoki yozma roziligi asosida ro‘y bergan muddatli tug‘ruqlar. Tekshirishdan chetlashtirish mezonlariga esa: 18 yoshdan kichik yoki 45 yoshdan katta bo‘lgan ayollar, ko‘p homilali homiladorliklar, yordamchi reproduktiv texnologiyalar natijasida homilador bo‘lganlar, ona yoki homilada rivojlanish nuqsonlari mavjudligi, og‘ir ekstragenital kasalliklar, OIV infeksiyasi, shuningdek, onada onkologik yoki autoimmun kasalliklar mavjudligi kiritildi.Kiritish va chiqarib tashlash mezonlariga muvofiq 85 nafar homilador ayol tanlab olindi, ular ikki guruhni tashkil etdi: 1-guruh (n=55) – muddatidan oldin tug‘ilgan va 2-guruh (n=50) – o‘z vaqtida tug‘ilgan. Barcha tadqiqotlar o‘z vaqtida yoki muddatidan oldin tug‘ilgan ayollar O‘zbekiston Respublikasi Sog‘liqni saqlash vazirligi Samarqand shahar 1-son tug‘ruq kompleksida tibbiy ko‘rikdan o‘tkazildi.

Ikkala guruhda ham umumiy, somatik va ginekologik anamnez, shuningdek, hayz davrining shakllanishi va faoliyati o‘rganildi. So‘rov usulidan foydalanib, homilador ayollarning bo‘yi, vazni va reproduktiv tarixini qo‘shimcha ravishda tahlil qildik. Tadqiqotga kiritilgan barcha bemorlarda quyidagi ko‘rsatkichlar aniqlandi: leykotsitlar soni (x 10^9/l), neytrofillar (%), eritrotsitlar (x 10^12/l), gemoglobin darajasi (g/l) (SYSMEX XN-1000 gematologiya analizatori), ferritin (mcg/l) (immunoassay tizimi), prolaktin (mIU/L) (ADVIA Centaur XP Immunoassay tizimi), relaksin (pg/ml) (ELISA), IL-6 (pg/l) (Caltag Laboratories, AQSH).

Statistik tahlil STATISTICA 13 paketi yordamida amalga oshirildi. O‘rtacha arifmetik (M) va standart og‘ish (m) bilan bir qatorda, ma'lumotlar median (Me), pastki va yuqori kvartillar bilan tavsiflangan. Bemor guruhlaridagi ko‘rsatkichlar o‘rtasidagi farqlar statistik ahamiyatga ega bo‘lishi uchun parametrik bo‘lmagan Mann-Whitney testi qo‘llanildi. Ko‘rsatkichlar o‘rtasidagi munosabatlar Spearmanning darajali korrelyatsiya koeffitsienti (R) yordamida baholandi. Agar $R \leq 0,25$ bo‘lsa, korrelyatsiya zaif, 0,25-0,75 bo‘lsa, korrelyatsiya kuchli deb hisoblandi. Ko‘rsatkichlarning paydo bo‘lish chastotasi % sifatida taqdim etildi va nisbiy chastotalarni solishtirish orqali tahlil qilindi. Statistik ahamiyat darajasi $p \leq 0,05$ belgilandi.

Natijalar va ularning muhokamasi

Taqqoslangan klinik guruhlar yoshi bo‘yicha bir xil bo‘ldi, p = 0,476. Erta tug‘ilganlar guruhida tana massasi indeksi (TMI) (25,08±2,96 kg/m²) muddatida tug‘ganlarga (23,0±1,88 kg/m²) nisbatan sezilarli darajada yuqori bo‘ldi (p=0,002).

Tadqiqot ishtirokchilari guruhlari bo‘yicha tana massasi indeksi (TMI)(1-jadval)

Guruhlar	TMI(kg/m²) p qiymat
Erta tug‘ilganlar (n=55)	**25,8±2,96**
Muddatli tug‘ilganlar (n=50)	**23,0±1,88**

So‘rov usuli yordamida hayz davrining shakllanishi va faoliyati tahlil qilindi. 1-guruhda birinchi hayz ko‘rish yoshi 11,45±0,99 yosh, 2-guruhda esa 12,28±1,20 yosh (p=0,003) bo‘ldi. 1 va 2-guruhlarda hayz ko‘rish davomiyligi esa mos ravishda 4,0±0,77 kun va 4,81±0,77 kun (p=0,008) bo‘lib, sezilarli farq aniqlandi. Bundan tashqari, hayz davrining davomiyligi (MC) 1 va 2 guruhlarda mos ravishda 28,76 ± 2,30 kun va 29,54 ± 2,19 kunni tashkil etdi, bu farq statistik jihatdan ahamiyatga ega emas edi (p = 0,093).

Hayz ko‘rishning erta boshlanishi va qisqa davomiyligi (4,0±0,77 kun) muddatidan oldin tug‘ilgan homilador ayollarda ko‘proq uchraydi, bu esa homiladorlikning ro‘yxatga olishida ushbu ko‘rsatkichlarni hisobga olish va erta tug‘ilish xavfini oldini olish uchun xavf guruhiga kiritish zarurligini ko‘rsatadi.

Hayz ko‘rish sifat xususiyatlari bo‘yicha tahlil qilish shuni ko‘rsatdiki, og‘riqli hayz ko‘rish muddatidan oldin tug‘ilgan bemorlarda (47,62%) ko‘proq uchraydi. Guruhlar o‘rtasida hayz paytida og‘riq borligi bo‘yicha sezilarli farq topilmagan bo‘lsa-da (p=0,751), so‘rov natijalari ko‘rsatdiki, og‘riqli hayz ko‘rish 22-27+6 haftalarda (65,38%) ko‘proq uchraydi va homiladorlikning keyingi bosqichlarida bu ko‘rsatkich sezilarli darajada past bo‘ladi (47,73%), p=0,004.

Somatik patologiyaning chastotasi bo‘yicha tahlil shuni ko‘rsatdiki, 1-guruhda (erta tug‘ilish) oshqozon-ichak trakti (GIT) kasalliklari va siydik yo‘llari infektsiyalari (UTI) statistik jihatdan sezilarli darajada ko‘proq uchraydi (p=0,003; p=0,006). Endokrin kasalliklarning chastotasi bo‘yicha ikkala guruh o‘rtasida ham sezilarli farq aniqlandi (p=0,022). Yurak-qon tomir patologiyasining chastotasi guruhlar o‘rtasida farq qilmadi (p = 0,961).

Somatik patologiyalarning chastotasi(2-jadval)

Somatik patologiya	1-guruh (Erta tug‘ilganlar)	2-guruh (Muddatli tug‘ilganlar)	p-qiymat
Oshqozon-ichak trakti kasalliklari	37,14%	14,00%	0,003
Siydik yo‘llari infektsiyalari	31,43%	10,00%	0,006
Endokrin kasalliklar	14,29%	4,00%	0,022

Ekstragenital patologiyaning paydo bo‘lish chastotalari taqsimoti 2-jadvalda keltirilgan. 22-27+6 haftada juda erta tug‘ilgan bemorlarda

oshqozon-ichak trakti kasalliklari, siydik yo‘llari infektsiyalari, endokrin patologiyalar chastotasi homiladorlikning 28 haftasidan 37 haftagacha bo‘lgan davrga nisbatan yuqori bo‘lgan.

Anemiya (42,86%) va bakterial vaginoz (42,86%) erta tug‘ilish bilan homiladorlikni murakkablashtirishda muhim omil sifatida ko‘rsatilgan. Biroq, guruhlar o‘rtasida bu ko‘rsatkichlar bo‘yicha sezilarli farqlar aniqlanmadi. Anemiya 22-27+6 haftada (40,91%) juda erta tug‘ilgan homilador ayollarda ko‘proq uchraydi, shuningdek bakterial vaginoz ham tez-tez uchraydi (50,0%).

Gemoglobin darajasi va eritrotsitlar soni tahlil qilinib, 1-guruhdagi gemoglobin darajasi (erta tug‘ilish) 114,12±12,22 g/l, 2-guruhdagidan (muddatli tug‘ilish) sezilarli darajada past bo‘lgan (121,95±10,36 g/l) (p=0,002). Erta tug‘ilganlar guruhida qizil qon hujayralari soni ham sezilarli darajada past bo‘lgan (p = 0,018). Ferritin darajasidagi sezilarli farq (p=0,001) ham homilador ayolni ro‘yxatga olishda ushbu ko‘rsatkichni aniqlash zarurligini ko‘rsatadi. Ba'zi mualliflar ferritinni erta tug‘ilishning belgisi sifatida tasniflashadi.

Proinflamatuar belgilarni tahlil qilishda leykotsitlar va neytrofillar soni, shuningdek IL-6 darajasi bo‘yicha sezilarli farqlar topildi (5-jadval). 1-guruhda leykotsitlarning umumiy soni (erta tug‘ilish) 14,40±4,66 x10⁹/l, 2-guruhdagidan (muddatli tug‘ilish) sezilarli darajada yuqori bo‘ldi (11,97±2,38 x10⁹/l) (p=0,021).

Laborator ko‘rsatkichlar va guruhlar bo‘yicha farqlar (3-jadval)

Ko‘rsatkich	1-guruh (Erta tug‘ilganlar)	2-guruh (Muddatli tug‘ilganlar)	p-qiymat
Gemoglobin (g/l)	114,12±12,22	121,95±10,36	0,002
Eritrotsitlar (x10^12/l)	4,03±0,37	4,25±0,32	0,018
Ferritin (mcg/l)	42,86±15,48	72,48±18,24	0,001
Leykotsitlar (x10^9/l)	14,40±4,66	11,97±2,38	0,021
Neutrofillar (%)	81,46±7,85	72,24±7,16	0,003
IL-6 (pg/ml)	124,78±10,88	80,96±5,07	0,002

Prolaktin va Relaksin darajalari (4-jadval)

Gormon	1-guruh (Erta tug‘ilganlar)	2-guruh (Muddatli tug‘ilganlar)	p-qiymat
Prolaktin (mIU/L)	4331,07±1336,18	3691,77±1535,33	0,019
Relaksin (pg/ml)	7,28±3,10	6,97±2,80	0,072

1-guruhda (erta tug‘ruq qilgan ayollar) neytrofillar darajasi 81,46±7,85% ni tashkil etib, bu ko‘rsatkich 2-guruh (muddatida tug‘ruq qilgan ayollar) bilan taqqoslaganda ancha yuqori bo‘ldi (72,24±7,16%), statistik jihatdan ishonchli farq qayd etildi (p=0,003). IL-6 sitokinining konsentratsiyasi ham ikki guruh orasida sezilarli tafovutga ega bo‘lib, erta tug‘ilish holatlarida o‘rtacha 124,78±10,88 pg/ml, muddatli tug‘ilishda esa 80,96±5,07 pg/ml ni tashkil etdi (p=0,002). IL-6 ning eng yuqori ko‘rsatkichlari homiladorlikning 22-27+6 haftalari oralig‘ida tug‘ilgan ayollarda aniqlangan. Ushbu ma’lumotlar IL-6 darajasining ortishi erta tug‘ilish rivojlanishiga bevosita bog‘liqligini ko‘rsatuvchi mavjud ilmiy dalillar bilan mos keladi. Belgilangan ko‘rsatkichlar orasidagi mumkin bo‘lgan korrelyatsiyalar erta tug‘ilishning rivojlanishi uchun prognostik matematik modelni yaratishda ishlatiladi. Progesteronning neytrofillarning funktsional faolligiga ta'siri, uning yuzasida va yadro tuzilmalarida progesteron retseptorlari mavjudligi to‘g‘risidagi ko‘rsatmalar adabiyotda keltirilgan. Shuningdek, relaksin, progesteron kabi, sariq tananing gormoni sifatida erta tug‘ilishning belgisi sifatida qabul qilinadi. Relaksin qon tomir tonusiga, miyometrium va biriktiruvchi to‘qimalarning, shuningdek, sut bezlarining proliferativ xususiyatlariga ta'sir qiladi. Shu sababli, prolaktin o‘rganish ham dolzarb bo‘lib, relaksin va prolaktin o‘rtasidagi progesteron sintezini tartibga solish bilan bog‘liq potentsial funktsional munosabatlarni ko‘rsatuvchi eksperimental tadqiqotlar mavjud.

Tadqiqotda taqqoslangan guruhlarda relaksin va prolaktin darajalarining o‘zgarishi tahlil qilindi. 1-guruhda prolaktinning darajasi (4331,07 ± 1336,18 mU/l) muddatli tug‘ilish guruhiga qaraganda sezilarli darajada yuqori bo‘lgan (3691,77±1535,33 mU/l, p=0,019). Shu bilan birga, relaksin darajasi guruhlar o‘rtasida farq qilmagan (p=0,072). Spearman darajasidagi korrelyatsiya koeffitsienti (R) prolaktin va relaksin darajalari o‘rtasidagi korrelyatsiyani 0,506 deb belgilagan. 1-guruhda prolaktin va relaksin o‘rtasidagi o‘rtacha korrelyatsiya R = 0,515 va muddatli tug‘ilish uchun R = 0,454 bo‘lgan. Bu ma'lumotlar prolaktin va relaksinning homiladorlikning birinchi trimestridan boshlab bir-birini ishlab chiqarishni rag‘batlantirishini ko‘rsatadi, bu esa klinik jihatdan erta tug‘ilishni rag‘batlantirishi mumkin.

Erta tug‘ilish ehtimoli bilan bir qator ko‘rsatkichlar o‘rtasidagi korrelyatsiyalar tahlil qilindi. Quyida, homiladorlik davri va eng muhim ko‘rsatkichlar o‘rtasidagi statistik jihatdan muhim korrelyatsiyalar keltirilgan:

- IL-6 konsentratsiyasi va ferritin darajasi o‘rtasidagi kuchli bog‘liqlik: R = -0,865 va R = 0,866.
- Siydik yo‘llari infektsiyalari va oshqozon-ichak kasalliklari bilan o‘rtacha korrelyatsiya: R = 0,525 va R = 0,553.
- Neutrofillar darajasi va prolaktin darajalari bilan o‘rtacha korrelyatsiya: R = -0,519.
- Menarxe yoshi va hayz ko‘rishning davomiyligi bilan bog‘liq ijobiy korrelyatsiyalar: R = 0,338.
- Hayz ko‘rish davri va leykotsitlar darajasi bilan homiladorlikning rivojlanishi o‘rtasidagi salbiy korrelyatsiya: R = -0,253.

Bu ko‘rsatkichlar erta tug‘ilish ehtimoli va homiladorlikning rivojlanishiga ta'sir qiluvchi muhim omillarni aniqlashda yordam beradi. Ularning o‘zaro aloqalari va korrelyatsiyalarining aniqlanishi erta tug‘ilishni prognoz qilishda yordam beradigan metodologiyani rivojlantirish uchun zaruriy asoslarni taqdim etadi.

Olib borilgan tadqiqotlar natijasida erta tug‘ilish ehtimolini oshiruvchi asosiy xavf omillari aniqlab olindi. Ushbu omillar tarkibiga tana massasi indeksi (TMI), birinchi hayz ko‘rish yoshi, hayz siklining davomiyligi, relaksin va prolaktin gormonlari darajalari, leykotsitlar, neytrofillar, eritrotsitlar soni, gemoglobin miqdori, IL-6 va ferritin kontsentratsiyasi, shuningdek, somatik va endokrin patologiyalar, endokrin tizim kasalliklari hamda tos a’zolarining yallig‘lanish kasalliklari kiradi. Ushbu omillarni tahlil qilish va ularning o‘zaro aloqalarini o‘rganish orqali, biz erta tug‘ilishni bashorat qilish uchun foydali prognoz usullarini yaratishga muvaffaq bo‘ldik.

Xulosa: Tadqiqotlar natijasida erta tug‘ilishning yuzaga kelishiga sezilarli darajada ta’sir ko‘rsatuvchi asosiy xavf omillari aniqlab olindi. Bular orasida ayol anamneziga oid ko‘rsatkichlar — menarx yoshi, hayz ko‘rish muddati, oshqozon-ichak tizimi kasalliklari, siydik yo‘llari infeksiyalari (UTI) va endokrin patologiyalar; homiladorlik davrida aniqlangan laborator parametrlar — neytrofillar, leykotsitlar, IL-6 va ferritin darajalari; shuningdek, prolaktin va relaksin gormonlari kontsentratsiyasi muhim diagnostik ahamiyat kasb etadi.Belgilangan omillar erta tug‘ilishning rivojlanishi bilan bog‘liq va ularni bashorat qilish homiladorlikni va erta tug‘ilish holatlarini oldini olish uchun muhimdir. Ushbu omillar asosida prognozlash usullarini yaratish homiladorlikning xavfli davrlarini aniqlashga va erta tug‘ilish sonini

kamaytirishga yordam beradi. Bu esa, o‘z navbatida, onalarning va ularning bolalarining hayot sifatini yaxshilashga imkon yaratadi.

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THE HEMOSTASIS SYSTEM'S CONDITION IN EXPECTANT WOMEN WITH ACUTE RESPIRATORY DISORDERS

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ABSTRACT

Pregnancy and post thromboembolic problems are associated with acute respiratory disorders. We examined the hemostasis system's condition in 50 pregnant women from the control group and 105 pregnant women with ARD. INR, D-dimer, APTT, platelet count and aggregation function, and fibrinogen were the parameters that were measured. The severity of the patient's condition determined how frequently tests were performed.
Key words: acute respiratory diseases, hemostasis, aggregation, fibrinogen

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O'TKIR RESPIRATOR KASALLIKKA CHALINGAN HOMILADOR AYOLLARDA GEMOSTAZ TIZIMI HOLATI

ANNOTATSIYA

Homiladorlik va post tromboembolik muammolar o'tkir nafas yo'llarining buzilishi bilan bog'liq. Biz nazorat guruhidagi 50 homilador va o'tkir respirator kasallik bilan og'rigan 105 homilador ayollarda gemostaz tizimining holatini tekshirdik. INR, D-dimer, APTT, trombotsitlar soni va agregatsiya funksiyasi va fibrinogen o'lchangan parametrlar edi. Sinovlarning chastotasi bemorning ahvolining og'irligiga bog'liq.
Kalit so'zlar: o'tkir respirator kasalliklar, gemostaz, agregatsiya, fibrinogen

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СОСТОЯНИЕ СИСТЕМЫ ГЕМОСТАЗА У БЕРЕМЕННЫХ С ОСТРЫМИ РЕСПИРАТОРНЫМИ ЗАБОЛЕВАНИЯМИ

АННОТАЦИЯ

Беременность и посттромбоэмболические осложнения связаны с острыми респираторными заболеваниями. Мы исследовали состояние системы гемостаза у 50 беременных из контрольной группы и 105 беременных с ОРЗ. Были измерены МНО, D-димер, АЧТВ,

количество тромбоцитов, агрегационная функция и уровень фибриногена. Частота проведения анализов зависела от тяжести состояния пациента.

Ключевые слова: острые респираторные заболевания, гемостаз, агрегация, фибриноген

Relevance. A hypercoagulable state is brought on by the physiological changes that occur naturally during pregnancy. A rise in coagulation factors (factors VII, VIII, and X; von Willebrand factor (vWF); D-dimer; C-reactive protein; and fibrinogen) is the first way this is seen. The number of fibrinolytic system inhibitors rises concurrently. Prothrombin time (PT) and/or activated partial thromboplastin time (APTT) are also moderately prolonged, protein C levels are decreased, and resistance to activated protein C rises, particularly in the second and third trimesters, making these factors ineffective at preventing coagulation.

Because the pregnant uterus compresses the pelvic veins, reducing circulation in the lower extremities, anatomical changes in the pregnant woman's body also play a significant impact. A thrombus, or blood clot, may form as a result of the stasis this causes [1, 3, 6]. As a result, it is highly advised that all hospitalized ARD patients have their platelet count, PT and/or APTT levels, D-dimer, and fibrinogen monitored.

ARD-induced endothelial cell invasion causes endothelial cell injury and interferes with fibrinolytic activity, which encourages thrombus formation and a large release of vWF. The hypercoagulable state is made worse by the suppression of the clot lysis mechanism caused by a loss of protective endothelium function. Increased intravascular fibrin deposition is another effect of ARD that slows circulation and raises blood viscosity. These findings all support the idea that ARD increases the risk of thrombus formation and thromboembolism [4, 7]. Neutrophilia, leukocytosis, extended PT, raised D-dimers, and enhanced interleukins, IL-6 and IL-8, have all been linked to ARD. Critical illness progression is predicted by the neutrophil-to-lymphocyte ratio (NLR) (low risk NLR <3.13, high risk ≥3.13) [2, 6].

Early-stage ARD coagulopathy is typified by the emergence of hypercoagulation in the absence of disseminated intravascular coagulation (DIC) symptoms. D-dimer rises, platelet counts moderately decline (70–95% of patients have a platelet count <150*10⁹/l), PT somewhat prolongs, and fibrinogen (also known as "acute-phase protein") rises. While the concentration of protein C remains relatively constant, the concentration of antithrombin III drops to 80% at the same time [5, 8].

The purpose of the study. To evaluate the effect of acute respiratory diseases on the hemostasis system in pregnant women.

Materials and Procedures. In addition to the laboratory of Maternity Complex No. 1 and the private clinic "Happy Mama" in Samarkand city, the study was carried out at the Specialized Maternity Center for Pregnant Women with ARD in the Samarkand region.

We looked at 155 women between the ages of 20 and 35. All patients were split up into two groups to complete the tasks:

105 pregnant women who had recovered from ARD made up the main group (I), which was then separated into three subgroups:

1a: ARD in the first trimester of pregnancy in 35 pregnant women

1b: ARD in the second trimester of pregnancy in 35 pregnant women

1c: 35 expectant mothers who experienced ARD throughout the third trimester of their pregnancy;

II: 50 expectant mothers in generally good health.

The following blood coagulation system parameters were analyzed as part of the research: D-dimer, RCMF, prothrombin time, antithrombin III activity, platelet count, platelet aggregation, APTT, INR, fibrinogen concentration, and Lee-White clotting time.

Results and Discussion.

Based on the aforementioned, we assessed the hemostasis system in pregnant women with ARD in different trimesters.

pregnancy-related hemostasis system status in women with moderate ARD.

Table 1.

Condition of the hemostasis system in mildly ill pregnant women (M ± m)

Parameters	Control group (n = 50)	Pregnant women with mild ARD (n = 19)	P
Lee-White clotting time (min)	7.2 ± 0.3	7.8 ± 0.4	>0.2
INR (International Normalized Ratio)	0.90 ± 0.04	0.95 ± 0.02	>0.2
Fibrinogen concentration (g/L)	4.6 ± 0.2	4.9 ± 0.2	>0.2
APTT (Activated Partial Thromboplastin Time, sec)	17.1 ± 0.6	24.9 ± 0.9	<0.001
Platelet count (1x10^9 /L)	221.7 ± 3.4	180.5 ± 6.5	<0.001
Platelet aggregation (stimulation with ADP 1x10^-3 M Tma %)	40.2 ± 1.4	42.1 ± 1.5	>0.5
D-dimer (ng/mL)	421.3 ± 5.7	571.9 ± 20.4	<0.001
RKMF	Negative	Negative	-
Prothrombin time	10.3 ± 0.4	14.8 ± 0.5	<0.001
Antithrombin III activity (%)	89.6 ± 3.1	93.0 ± 3.3	>0.5

Note: P - significance of differences between the compared indicators and the group of pregnant women without ARD (Acute Respiratory Disease).

Table 2.

Comparative characteristics of the coagulogram in healthy patients and pregnant women with mild ARD

Parameters	Healthy pregnant women (n = 50)	Pregnant women with mild ARD (n = 19)	χ^2	P	OR	Min CI	Max CI
Clotting time (min)							
≤ 6 minutes	17	4	1.090	0.296	0.52	0.15	1.80
≥ 6 minutes	33	15	1.090	0.296	1.93	0.55	6.73
INR ≤ 1	27	9	0.243	0.622	0.77	0.27	2.21
INR ≥ 1	23	10	0.243	0.622	1.30	0.45	3.76

Parameters	Healthy pregnant women (n = 50)	Pregnant women with mild ARD (n = 19)	χ^2	P	OR	Min CI	Max CI
Fibrinogen concentration (g/L)							
≤ 5	32	9	1.579	0.209	0.51	0.17	1.48
≥ 5	18	10	1.579	0.209	1.98	0.68	5.76
APTT (sec)							
≤ 20 sec	38	1	28.034	0.0001	0.02	0.00	0.15
≥ 20 sec	12	18	28.034	0.0001	57.00	6.87	472.84
Platelet count (1x10^9/L)							
< 200	14	14	11.917	0.001	7.20	2.18	23.74
≥ 200	36	5	11.917	0.001	0.14	0.04	0.46
Platelet aggregation (%)							
≤ 30	11	0	4.973	0.026	0.00	-	-
≥ 30	39	19	4.973	0.026	-	-	-
D-dimer							
≤ 450	35	0	26.991	0.0001	0.00	-	-
≥ 450	15	19	26.991	0.0001	-	-	-
Prothrombin time							
< 9	19	0	9.964	0.002	0.00	-	-
≥ 9	31	19	9.964	0.002	-	-	-

The average hemostasis indicators in pregnant women with moderate types of ARD did not differ substantially from the control group, as shown in Tables 1 and 2. In contrast to pregnant women in the control group, some indicators, including APTT (activated partial thromboplastin time), platelet count, D-dimer, and prothrombin time, demonstrated notable variations in the direction of an increase. Pregnant women who have mild ARD are therefore at risk for increased thrombosis, which calls for proper treatment. Although the readings stayed within reference limits, pregnant women with mild ARD should get special attention due to the considerable drop in platelet levels.

Table 3.

State of the hemostasis system in pregnant women with moderate ARD (M ± m)

Parameters	Control group (n = 50)	Pregnant women with moderate ARD(n = 61)	P
Clotting time (min)	7.2 ± 0.3	6.0 ± 0.2	<0.01
INR (International Normalized Ratio)	0.90 ± 0.04	1.64 ± 0.06	<0.001
Fibrinogen concentration (g/L)	4.6 ± 0.2	4.3 ± 0.2	>0.5
APTT (sec)	17.1 ± 0.5	19.1 ± 0.7	<0.01
Platelet count (1x10^9 /L)	220.6 ± 5.8	152.6 ± 6.1	<0.001
Platelet aggregation (stimulation with ADP 1x10^-3 M Tma %)	40.2 ± 1.4	38.0 ± 1.4	>0.2
D-dimer	423.2 ± 11.1	990.9 ± 16.8	<0.001
RKMF	Negative	Positive (+++)	-
Prothrombin time	10.3 ± 0.4	6.6 ± 0.2	<0.001

Table 4.

Comparative characteristics of the coagulogram in healthy patients and pregnant women with moderate ARD

Parameters	Healthy pregnant women (n = 50)	Pregnant women with moderate ARD (n = 61)	χ^2	P	OR	Min CI	Max CI
Clotting time (min)							
≤ 6 minutes	17	28	1.615	0.204	1.65	0.76	3.56
≥ 6 minutes	33	33	1.615	0.204	0.61	0.28	1.31
INR ≤ 1	27	4	30.726	0.000	0.06	0.02	0.19
INR ≥ 1	23	57	30.726	0.000	16.73	5.26	53.17

Parameters	Healthy pregnant women (n = 50)	Pregnant women with moderate ARD (n = 61)	χ^2	P	OR	Min CI	Max CI
Fibrinogen concentration (g/L)							
≤ 5	32	40	0.030	0.863	1.07	0.49	2.34
≥ 5	18	21	0.030	0.863	0.93	0.43	2.04
APTT (sec)							
≤ 20 sec	38	33	5.718	0.017	0.37	0.16	0.85
≥ 20 sec	12	28	5.718	0.017	2.69	1.18	6.11
Platelet count (1x10^9/L)							
< 200	14	49	30.655	0.000	10.50	4.34	25.39
≥ 200	36	12	30.655	0.000	0.10	0.04	0.23
Platelet aggregation (%)							
≤ 30	11	18	0.803	0.370	1.48	0.62	3.53
≥ 30	39	43	0.803	0.370	0.67	0.28	1.60
D-dimer							
≤ 450	35	0	62.364	0.000	0.00	-	-
≥ 450	15	61	62.364	0.000	-	-	-
Prothrombin time							
< 9	19	52	26.609	0.000	9.43	3.80	23.40
≥ 9	31	9	26.609	0.000	0.11	0.04	0.26

There was a notable rise in APTT in the group of patients with mild ARD, which suggests a low coagulation potential of the blood and increases the risk of bleeding during or after delivery. D-dimer and INR both significantly increased at the same time, suggesting an active thrombotic process. Concurrently, a notable reduction in clotting time occurred, which may indicate a hypercoagulatory phase of disseminated intravascular coagulation (DIC) syndrome. The blood of pregnant women with moderate ARD showed a considerable number of soluble fibrin monomer complexes, which suggests a high risk of thrombus formation due to the development of thrombophilia and a dramatic decline in hemostasis.

Table 5.

Key parameters of the hemostasis system in pregnant women with severe ARD (M ± m)

Parameters	Control group (n = 50)	Pregnant women with severe ARD (n = 25)	P
Clotting time (sec)	7.2 ± 0.3	5.0 ± 0.2	<0.001
INR (International Normalized Ratio)	0.90 ± 0.04	2.02 ± 0.05	<0.001
Fibrinogen concentration (g/L)	4.6 ± 0.2	5.9 ± 0.3	<0.001
APTT (sec)	17.1 ± 0.5	22.1 ± 0.7	<0.001
Platelet count (1x10^9 /L)	220.6 ± 5.8	152.7 ± 4.8	<0.001
Platelet aggregation (stimulation with ADP 1x10^-3 M Tma %)	40.2 ± 1.4	33.9 ± 0.9	<0.001
D-dimer	423.2 ± 11.1	1347.2 ± 42.2	<0.001
RKMF	Negative	Positive (+++)	-
Prothrombin time	10.3 ± 0.4		

Note: R – reliability of the differences in the indicators compared to the control group;

Hemostasis System Status in Pregnant Women with Severe ARD

The hemostasis system was studied in 25 pregnant women with severe ARD (Tables 5 and 6).

Table 6.

Comparative characteristics of coagulation parameters in healthy pregnant women and those with severe ARD.

Indicators	Healthy Pregnant Women n=50 (abs.)	Pregnant Women with Severe ARD n=25 (abs.)	χ^2	P	OR	95% CI min	95% CI max
Clotting Time (min)							
Less than 6 minutes	17	19	11.779	0.001	6.15	2.07	18.26
6 minutes or more	33	6	11.779	0.001	0.16	0.05	0.48

Indicators	Healthy Pregnant Women n=50 (abs.)	Pregnant Women with Severe ARD n=25 (abs.)	χ^2	P	OR	95% CI min	95% CI max
INR (International Normalized Ratio)							
Less than 1	27	0	21.094	0.000	0.00	-	-
1 or more	23	25	21.094	0.000	-	-	-
Fibrinogen Concentration (g/l)							
Less than 5	32	9	5.273	0.022	0.32	0.12	0.86
5 or more	18	16	5.273	0.022	3.16	1.16	8.59
APTT (sec)							
Less than 20	38	9	11.398	0.001	0.18	0.06	0.50
20 seconds or more	12	16	11.398	0.001	5.63	1.98	15.98
Platelet Count (1x109/l)							
Less than 200	14	25	34.615	0.000	-	-	-
200 or more	36	0	34.615	0.000	0.00	-	-
Platelet Aggregation (%)							
Less than 30	11	6	0.038	0.845	1.12	0.36	3.49
30 or more	39	19	0.038	0.845	0.89	0.29	2.78
D-dimer							
Less than 450	35	0	32.813	0.000	0.00	-	-
450 or more	15	25	32.813	0.000	-	-	-
Prothrombin Time							
Less than 9	19	25	26.420	0.000	-	-	-
9 or more	31	0	26.420	0.000	0.00	-	-

When comparing pregnant women with severe ARD to the control group and two additional comparison groups, all hemostasis indicators were noticeably worse. Based on the clinical history of the condition, which includes severe pneumonia and ARDS, these findings clearly show thrombophilia. This group's patients were all delivered in an emergency using general thrombosis prevention techniques. Low molecular weight heparins, or direct anticoagulants, were prescribed following delivery.

Table 6.

Correlation matrix of hemostasis parameters with the severity of ARD and trimester of disease onset

r (P<0.05)	Severity of ARD	Trimester of Disease Onset
Clotting Time (min)	-0.68	-0.62
INR (International Normalized Ratio)	0.75	0.72
Fibrinogen Concentration (g/l)	0.58	0.62
APTT (sec)	-0.72	-0.74
Platelet Count (1x109/l)	-0.58	-0.59
Platelet Aggregation	-0.71	-0.62
D-dimer	0.86	0.80
Prothrombin Time	-0.71	-0.75

Conclusion.

According to the information above, hypercoagulation was evident in the early stages of the illness, however coagulation abnormalities linked to the viral invasion did not exhibit symptoms of DIC syndrome. Antithrombin III activity did not decrease, indicating the absence of microangiopathy and the inability to discuss DIC syndrome at this time. This was demonstrated by a sharp increase in D-dimer levels, a moderate decrease in platelet count, a prolonged prothrombin time, and an increase in fibrinogen levels (response to acute phase inflammation). But when the illness worsened, hypercoagulation increased and intravascular coagulation symptoms emerged. Significant associations were found when the severity of ARD, the trimester of disease onset, and hemostasis indicators were analyzed. In particular, clotting time, platelet count, and the severity of ARD as well as the trimester of disease onset were revealed to be moderately negatively correlated (Table 6). There was a change in the hemostasis system toward higher coagulation, which was indicative of endothelial dysfunction and connected with the disease's severity.

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UDC 618.173

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THE ROLE OF VITAMIN D IN ALLEVIATING MENOPAUSE SYMPTOMS

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ANNOTATION

Our goal was to look into the connection between serum vitamin D levels and menopausal symptoms. We used the Menopause Rating Scale (MRS) questionnaire to assess menopause symptoms in 90 postmenopausal women between the ages of 45 and 60. Based on their serum 25-OH vitamin D levels, patients were split into three groups: sufficient (>20 ng/mL), insufficient (12-20 ng/mL), and deficient (<12 ng/mL). These groups were then compared. The cut-off level of serum vitamin D for menopausal symptoms was established. The connections between vitamin D levels and symptoms were computed. Of the individuals, 42.2% (38/90) had vitamin D insufficiency. The vitamin D insufficiency group had a considerably higher total MRS score than the others ($p<0,002$), at 20,87±2,61. Somatic, psychological, and urogenital subscale scores were greater in the deficient group than in the other groups ($p<0,002$, $p=0,006$, and $p=0.035$, respectively). The current investigation showed a connection between menopause-related symptoms in the postmenopausal population and serum vitamin D levels. Menopausal symptoms may worsen if vitamin D levels are low during this time.

Key words: vitamin D, postmenopausal symptoms, menopause, somatic diseases

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MENOPAUZA SIMPTOMLARINI YENGILLASHTIRISHDA VITAMIN D NING ROLI

ANNOTATSIYA

Bizning maqsadimiz qon zardobidagi D vitamini darajasi va menopauza simptomlari o'rtasidagi bog'liqlikni o'rganish edi. Menopauza alomatlarini baholash uchun 45-60 yosh orasidagi 90 nafar postmenopauza davridagi ayollarga Menopauza Reyting Shkalasi (MRS) so'rovnomasidan foydalandik. Bemorlarga ularning qon zardobidagi 25-OH D vitamini darajasiga qarab uchta guruhga ajratildi: yetarli (>20 ng/ml), yetarli emas (12-20 ng/ml) va yetishmovchilik (<12 ng/ml) guruhlari. Ushbu guruhlar o'zaro taqqoslandi. Menopauza alomatlari uchun qon zardobidagi D vitamini darajasining chegara qiymati aniqlashtirildi. D vitamini darajasi va menopauza alomatlari o'rtasidagi bog'liqlik hisoblandi. Tadqiqot natijalariga ko'ra, 42,2% (38/90) ishtirokchilarda D vitamini yetishmovchiligi aniqlandi. D vitamini yetishmovchiligi bo'lgan guruhning umumiy MRS balli boshqa guruhlarga qaraganda sezilarli darajada yuqori edi ($p<0,002$) va 20,87±2,61 ni tashkil etdi. Somatik, psixologik va urogenital subshkala ballari yetishmovchilik guruhida boshqa guruhlarga nisbatan yuqori bo'ldi (mos ravishda $p<0,002$, $p=0,006$ va $p=0,035$). Ushbu tadqiqot natijalari menopauza bilan bog'liq alomatlar va qon zardobidagi D vitamini darajasi o'rtasida bog'liqlik mavjudligini ko'rsatdi. Ushbu davrda D vitamini darajasining pastligi menopauza alomatlarini kuchaytirishi mumkin.

Kalit so'zlar: D vitamini, postmenopauza alomatlari, menopauza, somatik kasalliklar

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РОЛЬ ВИТАМИНА D В ОБЛЕГЧЕНИИ СИМПТОМОВ МЕНОПАУЗЫ

АННОТАЦИЯ

Нашей целью было изучить связь между уровнем витамина D в сыворотке и симптомами менопаузы. Мы использовали опросник шкалы оценки менопаузы (ШОМ) для оценки симптомов менопаузы у 90 женщин в постменопаузе в возрасте от 45 до 60 лет. На основании уровня 25-OH витамина D в сыворотке пациентки были разделены на три группы: достаточный (>20 нг/мл), недостаточный (12-20 нг/мл) и дефицитный (<12 нг/мл). Затем эти группы сравнивали. Был установлен пороговый уровень витамина D в сыворотке для симптомов менопаузы. Были рассчитаны связи между уровнем витамина D и симптомами. Из всех лиц, у 42.2% (38/90) наблюдалась недостаточность витамина D. Группа с недостаточностью витамина D имела значительно более высокий общий балл MRS, чем другие ($p < 0,002$), на уровне $20,87 \pm 2,61$. Соматические, психологические и урогенитальные подшкалы были выше в группе с дефицитом, чем в других группах ($p < 0,002$, $p = 0,006$ и $p = 0,035$ соответственно). Текущее исследование показало связь между симптомами, связанными с менопаузой, в популяции в постменопаузе и уровнем витамина D в сыворотке. Симптомы менопаузы могут ухудшиться, если уровень витамина D в это время низкий.

Ключевые слова: витамин D, постменопаузальные симптомы, менопауза, соматические заболевания.

Introduction. One lipophilic vitamin that is necessary for preserving calcium and phosphorus balance is vitamin D. Due to its significant global frequency and potential link to a number of acute and chronic illnesses, vitamin D insufficiency is a public health concern. In addition to dietary sources, exposure to ultraviolet B (UVB) sunlight provides a source of vitamin D. The liver transforms endogenously produced and exogenously eaten vitamers into 25-hydroxyvitamin D [25(OH)D]. One common biomarker of vitamin D nutritional status is [25(OH)D], a significant circulatory form [1]. 1α-hydroxylase in the kidney enzymatically transforms (25(OH) D) into physiologically active 1,25 dihydroxy Vitamin D [1,25(OH)2D] [2]. The activity of vitamin D mediates all of its metabolic processes.

In the kidney, the (25(OH) D) gets converted enzymatically by 1α-hydroxylase to biologically active 1,25 dihydroxy Vitamin D [1,25(OH)2D] [3]. Through gene regulation in target tissues, 1,25(OH)2D and vitamin D receptors (VDR) mediate all metabolic processes associated with vitamin D [4]. It has been noted time and time again that a large number of the correlations between hypovitaminosis and different hazards or clinical disorders are related to lifestyle, primarily to food practices and outdoor activities, rather than illnesses and metabolic alterations. Furthermore, postmenopausal women are more susceptible to some gender-specific dangers than men, such as osteoporosis, falls, and changes in body composition.

Vitamin D per se is not the only preventive factor for type 2 diabetes, muscle dysfunction, or any other health condition, but it can improve a number of metabolic functions, and interventions aimed at improving endogenous vitamin D status should be encouraged because hypovitaminosis D impairs many metabolic processes and regulatory mechanisms. Vitamin D intake should take into account basal health status and 25(OH)D levels, age, lifestyle, BMI, and comorbidities.

Regarding the attained serum 25(OH)D level, individual responses also have variation. Although 25(OH)D levels can be evaluated after 3–6 months to modify the suggested dose, regular monitoring is not required throughout vitamin D treatment due to its broad therapeutic index [5]. When it comes to raising serum 25(OH)D levels, vitamin D 3 (cholecalciferol) seems to be a better option than vitamin D 2 (ergocalciferol) [6]. Furthermore, using ergocalciferol interferes with measuring serum 25(OH)D using conventional techniques; hence, cholecalciferol (D 3) supplements are better than ergocalciferol (D 2).

However, bolus dosages may cause 24-hydroxylation, but daily doses may approach normal anticipated values if patients are exposed to sunlight, hence daily doses should be favored over high monthly doses. C-reactive protein, interleukin-10, leptin, and adiponectin levels did not alter substantially in older participants randomly assigned to a placebo and two monthly doses of cholecalciferol (750 or 1,500 mg) for a period of 12 months [7]. Compared to oral cholecalciferol, oral calcifediol raises serum 25(OH)D levels more quickly. In addition, it exhibits a linear dose-response curve that is unaffected by basal 25(OH)D levels, is three times more powerful than cholecalciferol, and has a greater intestine absorption rate.

On the other hand, intestinal absorption of cholecalciferol is reduced when 25(OH)D is near normal. The rapid and higher peak plasma calcifediol achieved in comparison to oral cholecalciferol may be explained by the fact that calcifediol is nearly 100% absorbed by the intestine and then transferred to the bloodstream via the portal vein, whereas oral cholecalciferol is transported by chylomicrons and enters the general circulation via the lymphatic pathway. Furthermore, calcifediol may be especially beneficial for people with impaired intestinal absorption, overweight people (because it is not as well absorbed into adipose tissue as other vitamin D compounds), and people on hepatic cytochrome P-450 (because it may inhibit calcifediol synthesis) [8].

Treatment with calcifediol (20 mg/day = 0.800 IU/day of vitamin D3) improved walking speed more than treatment with cholecalciferol (20 mg/day) in healthy postmenopausal women with low serum 25(OH)D levels [9].

The cessation of menstruation for a year in women with no apparent underlying causes is known as natural menopause. In the menopausal phase, low estrogen and high follicle stimulating hormone (FSH) concentrations are detected due to the decline or absence of ovarian follicles [10]. Numerous medical and psychological issues, including vasomotor symptoms, genito-urinary symptoms, mood swings, and sleep disturbances, might be brought on by this hormonal instability during the menopausal phase [11]. The person's quality of life, professional life, and interpersonal relationships may all suffer as a result of these menopausal symptom.

A fat-soluble vitamin, vitamin D has crucial roles in the musculoskeletal system and calcium metabolism. Vitamin D may control a wide range of other cellular processes in addition to its function in maintaining calcium and bone homeostasis. Accordingly, a lack of vitamin D can lead to a number of autoimmune, cardiovascular, and infectious illnesses [12]. Additionally, it was demonstrated that vitamin D protects women from cardiovascular risks [13]. Furthermore, a number of studies points to a possible link between vitamin D insufficiency and genitourinary symptoms, heat flashes, and irritability

In their randomized control experiment, researchers found that severe vitamin D deficiency was associated with anxiety, depression, and reduced functioning in both men and women (9). One year without menstruation is known as menopause, which occurs between the ages of 45 and 60 and is characterized as the end of the menstrual cycle due to decreased secretions of estrogen and progesterone [14]. Estrogen upregulates the VDR and enhances the activity of 1-α-hydroxylase, which is expressed in the kidneys and is responsible for activating vitamin D. The amount of estrogen generated by the ovaries gradually decreases during the menopausal periods [15], which contributes to vitamin D insufficiency. A reduction in the amount of VDR is linked to the ensuing vitamin D deficiency. In addition to preserving calcium homeostasis, vitamin D is crucial for a number of non-calcemic illnesses, including cancer, autoimmune disorders, neurological disorders, and infections. Because postmenopausal women

lose estrogen, they are more likely to suffer from a number of chronic illnesses. Because of changes in blood lipids and body composition (increased belly fat), a decrease in estrogen raises the risk of both breast cancer and cardiovascular disease (CVD). The body requires calcium, a necessary mineral, to form healthy bones and teeth and to participate in other biochemical processes. Osteoporosis is a severe health issue that results from its loss during menopause.

After the ovaries stop producing estrogen, menopausal osteoporosis develops. Additionally, because low vitamin D has been connected to bone demineralization, postmenopausal women are more likely to experience falls and bone fractures [16] as a result of vitamin D deficiency. Therefore, the purpose of this study is to assess how menopause affects postmenopausal women's serum vitamin D and hormonal status, as well as how lifestyle choices affect the onset of vitamin D deficiency.

Aim. To look into the connection between serum vitamin D levels and menopausal symptoms

Material and Methods. 90 postmenopausal women who applied for a standard gynecological checkup at a tertiary center gynecology clinic participated in this cross-sectional study. Each patient's signed informed consent and local ethical approval were obtained before demographics, medical histories, physical and gynecological examination results, including body mass index (BMI), and the participants' time since menopause were documented. Not experiencing menstrual bleeding for more than a year was considered menopause. Measurements were made of the patients' serum levels of 25-OH vitamin D, calcium (Ca), estradiol (E2), and follicule stimulating hormone (FSH). The Meopause Rating Scale (MRS), a questionnaire designed for Uzbek-speaking individuals, was used to assess menopausal symptoms in all patients (10).

A score of 0–4 is assigned to each of the 11 items in the MRS, which indicate how severe the symptom is (0, nonexistent; 1, mild; 2, moderate; 3, severe; 4, very severe) (Table 1). Three domains make up this questionnaire: the psychological subscale, which includes depressed mood, irritability, anxiety, and physical and mental exhaustion (items 4–7); the urogenital subscale, which includes sexual problems, bladder problems, and vaginal dryness (items 8–10); and the somatic subscale, which includes hot flashes, heart discomfort, sleep issues, and muscle and joint discomfort (items 1-3,11). The sum of the scores on each subscale is the overall MRS score. Severe scores were characterized as somatic scores greater than 8, psychological scores greater than 6, urogenital scores greater than 3, and total MRS scores greater than 16.

Table 1.

Menopause Rating Scale (MRS)

№	Symptoms	Score					
		0	1	2	3	4	Total score
1.	Hot flashes, sweating						
2.	Heart discomfort						
3.	Sleep problems						
4.	Depressive mood						
5.	Irritability						
6.	Anxiety						
7.	Physical and mental exhaustion						
8.	Sexual problems						
9.	Bladder problems						
10.	Dryness of vagina						
11.	Joint and muscular discomfort						

Results

The patients' ages ranged from 45 to 60 years old, with a mean age of 53.8 years. The patients' mean time since menopause was 6.1 years, with a range of 1 to 20 years. Of the individuals, 42.2% (38/90) had vitamin D insufficiency. 25-OH serum Thirty women had adequate levels of vitamin D (≥20 ng/mL). The remaining 38 patients had inadequate vitamin D levels, ranging from 12 to 19 ng/mL. Age, BMI, duration since menopause, and laboratory characteristics did not differ across groups (Table 2). The vitamin D insufficiency group's total MRS score was 22,97±2,71, which was substantially greater than the others' (p=0,002) (Table 2). Additionally, the deficient group's urogenital, psychological, and physical subscale scores were higher (Table 2; p=0,012, p=0,007, and p=0,036, respectively) than the other groups. In line with posthoc analysis, the deficient group's psychological ratings (8,02±2,87 and 9,42±5,15) differed significantly from the other groups. Similar to the insufficiency group (n=38), the deficiency group's urogenital subcale and total scores were considerably greater than those of the sufficiency group (Table 2). Patients' assessments for anxiety, emotional and physical exhaustion, sexual difficulties, and vaginal dryness were comparable between groups. In addition, the remaining MRS questionnaire values showed significant differences across groups (Table 3). The remaining 38 patients had inadequate vitamin D levels, ranging from 12 to 19 ng/mL. Age, BMI, duration since menopause, and laboratory characteristics did not differ across groups (Table 2). The vitamin D insufficiency group's total MRS score was 22,97±2,71, which was substantially greater than the others' (p=0,002) (Table 2).

Table 2.

Demographic, laboratory characteristics and rating scores of the subjects among groups.

Vitamin D levels	≥20 ng/mL	12-19 ng/mL	<12 ng/mL	P

And number of women	n=26	n=30	n=34	
Age (y)	51,20±4,68	52,50±4,33	51,71±3,87	NS
BMI (kg/m2)	30,45±4,60	31,04±4,37	30,34±4,77	NS
Time since menopause (y)	5,40±4,03	6,48±5,68	6,38±4,09	NS
Serum FSH (mIU/mL)	65,10±22,78	64,29±21,82	63,08±20,64	NS
Serum E2 (pg/mL)	17,41±14,89	19,09±11,18	16,56±10,90	NS
Serum Ca (mg/dL)	10,76±0,35	9,63±0,42	9,66±0,40	NS
Somatic subscale score	4,00±2,42	6,39±2,94	8,02±2,87	<0,002
Psychological subscale score	6,46±3,10	7,16±3,73	9,42±5,15*	0,007
Urogenital subscale score	3,90±2,02	5,23±3,09	5,52±2,71**	0,036
Total MRS score	13,73±5,93	17,71±7,55	21,97±2,71**	<0,002

y: years, BMI: body mass index, kg: kilogram, m:meter, FSH: Follicule stimulating hormone, E2: estradiol, Ca: calcium, MRS: Menopause reting scale, NS: non-significant.

*Statistical difference arises from group 1 and 2.

** Statistical difference arises from group 1.

p <0.051 was considered significant.

Table 3.

Results of Menopause Rating Scale parameters among serum 25-OH Vitamin D levels.

Parameters	25-OH Vitamin D levels			*p*
	≥20 ng/ Ml n=26	12-19 ng/mL n=30	<12 ng/ mL n=34	
Hot flushes	1,31±1,01	1,73±0,99	2,30±1,02	<0,001
Heart discomfort	0,39±0,56	1,00±0,95	1,50±1,01	<0,001
Sleep problems	1,190±1,09	1,34±1,23	1,83±1,11	0,043
Depressive mood	1,49±1,04	1,56±1,13	2,30±1,07	0,003
Irritability	1,53±1,07	1,76±1,19	2,38±1,16	0,006
Anxiety	1,35±1,03	1,81±1,14	2,79±4,78	NS
Physical and mental exhaustion	2,03±1,21	1,77±1,26	1,91±1,07	NS
Sexual problems	1,56±0,93	1,97±1,28	1,73±1,28	NS
Joint and muscular discomfort	1,20±1,09	1,58±1,28	2,09±1,22	0,041
Bladder problems	1,10±1,11	1,59±1,28	2,09±1,22	NS
Dryness of vagina	1,30±1,04	1,56±1,32	1,71±1,17	0,041

Additionally, the somatic, psychological, and urogenital subscale ratings in the deficient group were greater than those in the other groups (p=0,012, p=0,007, and p=0,036, respectively) (Table 2). Posthoc analysis revealed that the deficient group's psychological scores (8,02±2,87 and 9,42±5,15) differed significantly from the other groups. Similar to the insufficiency group (n=30), the deficiency group's urogenital subcale and total scores were considerably greater than those of the sufficiency group (Table 2). Patients' assessments for anxiety, emotional and physical exhaustion, sexual difficulties, and vaginal dryness were comparable between groups. In addition, the remaining MRS questionnaire values showed significant differences across groups (Table 2).

Discussion. Menopausal symptoms were chosen for their study, and participants were asked to rate the severity of each symptom. The total number of symptoms, regardless of severity, was used to calculate the total score. Therefore, in contrast to ours, the study did not use any validated questionnaires. In addition, the mean period after menopause in the aforementioned study was roughly 10 years longer than ours, and their individuals were older (60 years). The significant percentage of women who experienced menopause for more than ten years may be the reason they did not report any correlation between vitamin D levels and menopausal symptoms. Vitamin D must be converted by enzymes into active metabolites because it is physiologically inert when consumed through food or produced by the skin. It has been demonstrated that estrogen contributes to the rise in the vitamin D activating enzyme [17].

Thus, it is possible that the decline in estrogen levels during the postmenopausal phase could exacerbate neuropsychiatric problems and other subclinical vitamin D insufficiency symptoms. Data assessing vitamin D's neuroprotective function are scarce. Menopause may lead to memory impairment, according to an experimental investigation examining the impact of menopause on behavioral status. Cholecalciferol was found to have anxiolytic effects in rats with ovariectomies in addition to its effects on the hippocampus [18]. It is evident from these results that the psychological conclusion of our study is supported.

In the deficient group, the subjects' scores for irritation and depressed mood were significantly greater. Additionally, although it was not statistically significant, this group's anxiety level was higher. There was already a noticeable difference in the deficient group when looking at the overall psychiatric score. Similarly, it was noted that depression scores were high in the postmenopausal era and 25-OH vitamin D levels were low in a report discussing vitamin D and menopausal symptoms with a large patient group [19]. Despite considerable differences between patient groups, all groups had a severe psychological score (more than six). The high BMIs of our patients may be the cause of this score's harshness.

The elevated urogenital subscale ratings in the deficit and insufficiency groups were another finding in our investigation. The bladder issues area of this subscale in particular had a noticeably high score. According to the literature, there may be a correlation between low vitamin D levels and symptoms of the urinary tract. because low vitamin D levels may have an impact on the strength of the pelvic floor muscles. A study that included patients from both premenopausal and postmenopausal periods found that postmenopausal women with vitamin D levels below 20 ng/mL had reduced pelvic floor muscular strength. According to the same study, women with vitamin D insufficiency had greater urinary incontinence scores, although no statistically significant difference was seen. Our findings on vitamin D levels and symptoms related to the urinary system were statistically significant, in contrast to that study. Menopausal women may find somatic symptoms like hot flashes difficult to manage. The majority of women complain of these symptoms regardless of their vitamin D levels [20]. Vitamin D levels and somatic scores were found to be negatively correlated in our study. In rats, vitamin D has been shown to stop seratonin depletion. A decrease in seratonin levels may result in hot flashes because it is a neurotransmitter that plays a part in thermoregulation. In this sense, elevated vitamin D levels might provide protection against hot flashes and other menopausal physical symptoms. Furthermore, a recent study noted that women with normal vitamin D levels are less likely than those with vitamin D insufficiency to experience menopausal symptoms. The purpose of this study was to determine whether specific menopausal symptoms were brought on by vitamin D insufficiency. To do this, we employed the validated MRS questionnaire and excluded individuals with any other comorbidities in an effort to reduce outside factors that might have an impact on scale rates. In terms of demographics and hormones, our patient groups were comparable. In addition, we provided a cutoff 25-OH vitamin D level for women with adequate vitamin D levels who experience menopause-related symptoms. Our patients' period since menopause was brief, in contrast to the literature. Notwithstanding these advantages, the study had drawbacks. There was only one geographic area within our patient population. We were unable to assess the patients' parathormone levels or determine if supplementation would be effective in treating menopausal symptoms linked to vitamin D deficiency.

Conclusion. Insufficient vitamin D levels during the menopausal phase may make menopausal symptoms worse. One may argue that menopausal Vitamin D supplementation may be beneficial for women whose symptoms are severe. It will need more prospective research to fully illuminate this intricate and multifaceted relationship.

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THREATENED ABORTION: CLINICAL COURSE, PROGNOSIS, AND MANAGEMENT APPROACHES

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ABSTRACT

This article explores the real-world experiences and clinical outcomes of women facing threatened abortion during early pregnancy—a condition that causes not only physical concern but also emotional stress for expectant mothers. Threatened abortion is typically marked by vaginal bleeding before the 20th week of gestation, yet the pregnancy remains viable with the cervix still closed. Although many cases resolve without serious consequences, others may progress to miscarriage if not carefully monitored and treated. This study was carried out at the Multidisciplinary Clinic of Samarkand State Medical University between 2023 and 2024, involving 112 women who presented with symptoms such as spotting, lower abdominal discomfort, and uterine tension. By evaluating clinical signs, ultrasound findings, and hormonal levels—particularly progesterone—we aimed to better understand which factors influence pregnancy outcomes. Most women (68%) had mild symptoms and responded well to supportive outpatient care, including hormone therapy—however, nearly a third experienced more serious signs requiring hospitalisation and closer monitoring. Notably, women with lower progesterone levels were more likely to experience pregnancy loss, highlighting the hormone's vital role in early gestation. This study underscores the importance of timely diagnosis, compassionate care, and targeted treatment to protect both mother and child. It also calls for improved awareness and standardized care protocols in Uzbekistan to better support women at risk of early pregnancy complications.

Keywords: Threatened abortion, early pregnancy bleeding, progesterone levels, miscarriage risk, maternal health, prenatal care

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HOMILADORLIKNING UZILISHI XAVFI: KLINIK KECHISHI, PROGNOZI VA DAVOLASH YONDASHUVLARI

ANNOTATSIYA

Ushbu maqolada homiladorlikning ilk bosqichlarida uchraydigan va ona uchun jismoniy noqulaylik bilan birga, kuchli ruhiy xavotirga sabab bo'ladigan holat — homiladorlikni to'xtab qolish xavfi tahlil qilinadi. Odatda bu holat 20-haftagacha bo'lgan davrda vaginal qon ketishi, pastki qorin sohasida og'riq va bachadon ohangining ortishi bilan kechadi, biroq bachadon og'zi yopiq va homila hayotiy bo'ladi. Vaqtida aniqlansa, bu holat ko'pchilikda ijobiy yakun topadi, ammo ayrim holatlarda to'liq tushish xavfi mavjud bo'ladi. Tadqiqot 2023–2024-yillarda Samarqand Davlat Tibbiyot Universitetining Ko'p tarmoqli klinikasida olib borilgan bo'lib, unda 112 nafar homilador ayol ishtirok etdi. Ularning klinik belgilari, UTT natijalari hamda gormonal ko'rsatkichlari — ayniqsa, progesteron darajalari tahlil qilindi. Natijalarga ko'ra, bemorlarning 68 foizida simptomlar yengil kechib, ambulator davolanish yetarli bo'lgan. Qolgan 32 foiz ayollarda esa kuchli qon ketishi va bachadon bo'ynining yumshashi tufayli statsionar kuzatuv talab etilgan. Ayniqsa, past progesteron darajasi bo'lgan ayollar orasida homiladorlikni yo'qotish ko'rsatkichi yuqori bo'lgan. Ushbu tadqiqot homiladorlikning ilk bosqichida o'z vaqtida tashxis, gormonal tahlillar va ehtiyot choralarining muhimligini ko'rsatadi. Shuningdek, O'zbekiston sharoitida ushbu holatlarni barvaqt aniqlash va davolash bo'yicha yagona yondashuvlarni ishlab chiqish zarurati ta'kidlanadi.

Kalit so'zlar: Homiladorlikni to'xtab qolish xavfi, erta homiladorlikda qon ketishi, progesteron yetishmovchiligi, tushish xavfi, onaning salomatligi, prenatal parvarish

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УГРОЗА ПРЕРЫВАНИЯ БЕРЕМЕННОСТИ: КЛИНИЧЕСКОЕ ТЕЧЕНИЕ, ПРОГНОЗ И ПОДХОДЫ К ЛЕЧЕНИЮ

АННОТАЦИЯ

В данной статье рассматривается угроза прерывания беременности — одно из самых распространённых осложнений ранних сроков гестации, которое вызывает не только физическое недомогание, но и серьёзное эмоциональное напряжение у будущих матерей. Угроза прерывания проявляется вагинальным кровотечением до 20-й недели беременности при сохранённой жизнеспособности плода и закрытом шейке матки. Несмотря на то, что в ряде случаев состояние стабилизируется при своевременном лечении, существует риск прогрессирования до выкидыша. Исследование проведено в Многопрофильной клинике Самаркандского государственного медицинского университета в 2023–2024 годах и включало 112 женщин с симптомами угрозы выкидыша. Были проанализированы клинические проявления, данные ультразвуковых исследований, а также уровень прогестерона — ключевого гормона в поддержании беременности. У большинства пациенток (68%) симптомы были слабо выражены, и они успешно прошли амбулаторное лечение. Однако 32% женщин потребовали госпитализации из-за обильных кровотечений, боли и неблагоприятных прогностических признаков. Установлена чёткая взаимосвязь между пониженным уровнем прогестерона и неблагоприятным исходом беременности. Полученные данные подчёркивают важность ранней диагностики, внимательного отношения к жалобам женщин и своевременного гормонального вмешательства. Кроме того, результаты исследования подтверждают необходимость внедрения чётких диагностических алгоритмов и повышения осведомлённости специалистов в Узбекистане по вопросам ведения беременностей с высоким риском на ранних сроках.

Ключевые слова: Угроза прерывания беременности, ранние сроки, кровотечение, прогестерон, риск выкидыша, охрана материнства

Introduction

Early pregnancy presents Threatened abortion as one of its most common complications which affects approximately 20 percent of mothers worldwide during their first trimester. Medical practitioners identify threatened abortion through the manifestation of bleeding along with pelvic pain during a pregnancy with a tightly closed cervical opening and an intact fetus. Proper recognition and management at early stages becomes essential because some threatened abortion cases will eventually cause inevitable miscarriage. Expectant mothers commonly experience severe emotional challenges when facing threatened abortion since this condition typically produces increased anxiety and fear about losing their pregnancy together with psychological distress. From the medical perspective the condition indicates potential hormonal imbalances along with uterine problems and immunologic conditions which put pregnancy at risk of ending. Early prenatal care infrastructure development in Uzbekistan poses significant risks to pregnant women because delayed diagnoses and inadequate patient monitoring become widespread problems. Insufficient medical guidelines and limited access to biochemical assessments especially for progesterone hormone create challenges in managing uterine conditions. Patient care improvement requires a complete understanding of women who present with threatened abortion including their clinical manifestation together with their hormonal assessments and treatment results. Research data from 112 female patients treated at the Multidisciplinary Clinic of Samarkand State Medical University between 2023 and 2024 will help understand this subject further. The research identifies warning signs that could enable better maternal health care when implemented into updated standardized practices during early pregnancy.

Relevance

Early pregnancy complications include threatened abortion which affects between 15% and 20% of all clinically recognized pregnancies. Most threatened abortion cases go their own way but a substantial number result in miscarriage and several others develop into intrauterine growth restriction or preterm delivery conditions. The incidence of threatened abortion remains high in pregnant patients but healthcare providers frequently miss this diagnosis or fail to provide appropriate treatment especially in areas with limited prenatal services. The maternal health programs of Uzbekistan have achieved significant improvement during recent times while dealing with persistent barriers to manage early pregnancy complications. Early pregnancy intervention fails because the healthcare system provides limited access to hormonal tests together with delayed visits along with non-uniform diagnostic approaches create missed opportunities. The field of clinical care depends mainly on symptom observation instead of biochemical validation methods which includes progesterone level measurement as a vital pregnancy viability indicator. Pregnant women who experience threatened abortion must bear exceptional emotional and psychological stress which drives anxiety along with depression while intensifying their fear of losing their babies. It is crucial to handle these negative effects in locations where people consider childbearing and motherhood to be highly important social values. The research data proves significant to medical care since it establishes important information about Uzbek women's threatened abortion cases and their risk components and symptoms alongside their treatment results. The study works to develop evidence-based maternal and fetal outcome improvements through prompt diagnosis along with proper treatments while strengthening prenatal care initiatives by analyzing both early warning indicators and hormone levels.

Research Aim

The main purpose of this research evaluates how diagnosed threatened abortion affects pregnant women throughout their first pregnancy half regarding their clinical state and hormonal responses and delivery results. This research evaluates clinical cases from the Multidisciplinary Clinic of Samarkand State Medical University between 2023 and 2024 to determine predictive serum progesterone indicators which help identify expected pregnancy outcomes. The research objective includes patient classification according to symptom intensity through vaginal bleeding assessment and uterine rigidity measurement and abdominal discomfort evaluation while examining varied medical responses between outpatient hormone treatment and inpatient care. The investigation seeks to evaluate maternal and fetal outcome results while studying when patients present for care and obtain diagnostic tools. This work pursues to link regional information deficiencies about beginning pregnancy difficulties so it can assist Uzbekistan in establishing localized clinical protocols. The authors stress the importance of prompt diagnosis and rapid triage alongside hormone-based tracking since these measures constitute vital elements for stopping pregnancy failures and improving maternal reproductive wellness. Healthcare professionals and policymakers together with maternal care providers will receive insights about proven methods to handle threatened abortion through research findings that additionally promote both early prenatal care accessibility for at-risk women and effective management plans.

Literature Review

Threatened abortion, or threatened miscarriage, is one of the most frequently encountered complications in early pregnancy, affecting nearly one in five pregnant women globally [1]. Clinically, it presents with vaginal bleeding and mild abdominal discomfort during the first 20

weeks of gestation, without cervical dilation and with a viable fetus. While this condition does not always result in pregnancy loss, its occurrence is a strong predictor of subsequent complications, including spontaneous abortion, intrauterine growth restriction, and preterm birth [2].

Progesterone, a hormone crucial to maintaining early pregnancy, has been identified as a central player in the pathogenesis of threatened abortion. Its role in sustaining endometrial stability and preventing myometrial contractions is well-documented [3]. Numerous studies, including randomized controlled trials, have confirmed that low serum progesterone levels are significantly associated with poor pregnancy outcomes, and that progesterone supplementation improves live birth rates in women with early pregnancy bleeding [4].

Transvaginal ultrasound and serial β-hCG measurements remain essential diagnostic tools. The presence of a fetal heartbeat on ultrasound significantly lowers the risk of miscarriage, while absent cardiac activity, subchorionic hematoma, and reduced gestational sac size are considered poor prognostic indicators [5].

From a psychosocial perspective, early pregnancy bleeding creates a high level of anxiety among women and their families. Studies show that women with threatened abortion may experience increased levels of stress, depression, and fear of recurrent miscarriage [6]. These findings highlight the need for not only physical but also psychological support as part of comprehensive care.

In Uzbekistan, limited access to biochemical testing, late referral to specialists, and inconsistent management strategies contribute to suboptimal care for women experiencing early pregnancy complications. While national maternal health programs have advanced in antenatal care coverage, early pregnancy remains an underserved area, particularly in rural and resource-limited settings [7].

Recent research within Uzbekistan has begun to address this gap. A study by Karimova and Yuldasheva (2023) emphasized the importance of routine serum progesterone screening in women presenting with first-trimester bleeding, recommending the integration of hormonal assessment into national prenatal guidelines [8]. This localized evidence underscores the need for context-specific protocols that account for the unique demographic, social, and infrastructural realities of the region.

Overall, integrating international best practices with regionally tailored approaches is key to improving outcomes. Greater awareness among healthcare providers, timely hormonal support, and improved access to ultrasound diagnostics can significantly reduce pregnancy loss related to threatened abortion in Uzbekistan.

Materials and Methods

The researchers at the Multidisciplinary Clinic of Samarkand State Medical University carried out this retrospective observational study throughout two years beginning in January 2023 until December 2024. A research analysis was performed to evaluate the presentation symptoms along with hormonal profiles and maternal outcomes in pregnant women who were diagnosed with threatened abortion. An institutional ethics committee sanctioned the research project while additional steps were taken to anonymize patient data for the purpose of privacy protection and ethical conformity. The research surveyed 112 pregnant women between 18 and 40 years of age who showed signs of threatened abortion within the first 20 weeks of pregnancy at the obstetric department. The study researcher included pregnant women who underwent transvaginal ultrasound confirmation of their pregnancy combined with a pelvic exam showing a closed cervical opening and at least one sign of threatened abortion including vaginal bleeding along with abdominal pain and heightened uterine tone. The research excluded patients who had more than one fetus, uterine birth defects, known genetic disorders or blood pressure and diabetes problems, and insufficient medical documentation. Medical staff obtained data from both hospital and outside medical report systems. Patient records included maternal age as well as parity and obstetric historical data and gestational week number when patients first presented to care. The study classified clinical signs through three types of vaginal bleeding severity and their combination with uterine irritability and abdominal pain. Every patient got a transvaginal ultrasonographic exam to verify fetal health and view gestational sac measurements and identify fetal heart signals. The medical team paid close observation to identify subchorionic hematomas because these hematological elements influence future health outcomes for patients.

The assessment included clinical components along with enzyme-linked immunosorbent assay (ELISA) measurement of progesterone levels in patient serum. The research results led to progesterone level grouping into three categories: low values under 10 ng/mL and borderline between 10–20 ng/mL and adequate when exceeding 20 ng/mL. The endocrine evaluation served to discover any relationships between hormone levels and maternal results. The management system for patients depended on symptom intensity as patients were treated in either outpatient care settings or stationary hospital wards. The recommended outpatient treatment for patients with mild bleeding and stable ultrasound results included bed rest combined with daily oral micronized progesterone dosage ranging from 200 to 400 mg and regular medical check-ups at seven to ten day intervals. Medical admission involved continuous observation and possible intramuscular and vaginal progesterone treatment for patients suffering from significant bleeding or worsening pain alongside decreased hormone values. The medical staff instructed all pregnant patients to abstain from sex and intense physical activities. Physicians classified pregnancy results into two groups: when women exceeded 20 weeks of gestation or when the pregnancy terminated in a miscarriage. Statistical evaluation occurred through SPSS version 23.0. The research employed descriptive statistics to process both demographic and clinical data points. The researchers utilized Chi-square tests together with independent t-tests to evaluate relationships between progesterone levels, clinical symptoms, and final outcomes. We considered statistical significance when p-value reached under 0.05. This research method replicated clinical Uzbekistan practices since laboratory equipment remains scarce throughout some regions while medical personnel base their decisions on both clinical intuition and specific tests. The evaluation strategy assessed healthcare treatments as well as the feasibility of implementing evidence-based care management in local healthcare settings.

Results and Discussion

The research included 112 pregnant women who experienced threatened abortion symptoms within the gestational periods of 6 to 20 weeks. The research aimed to find a connection between pregnancy results and both bleeding intensity as well as serum progesterone hormone concentrations. The results demonstrate that these two factors show meaningful statistical importance for early danger assessment so they can assist healthcare providers in their clinical decision-making process. The researchers divided serum progesterone measurement results into three specific ranges. The diagnostic results revealed that 34 percent of 112 participants (38) had progesterone levels below 10 ng/mL while 33 participants (29%) exceeded 20 ng/mL. Borderline levels (10–20 ng/mL) were found in 41 participants (37%).

This result indicates that more than two-thirds of women exhibited low or borderline progesterone levels, signifying hormonal susceptibility. Progesterone's critical function in sustaining early pregnancy—through endometrial stabilisation, decreased uterine contractility, and immune response modulation—highlights the necessity of screening in early gestation, particularly among high-risk groups.

The correlation between progesterone levels and the persistence of pregnancy was evident. Among individuals with levels below 10 ng/mL, hardly 21.1% of pregnancies advanced beyond 20 weeks. The continuation rate was 53.7% in the 10–20 ng/mL group and 81.8% in the >20 ng/mL group.

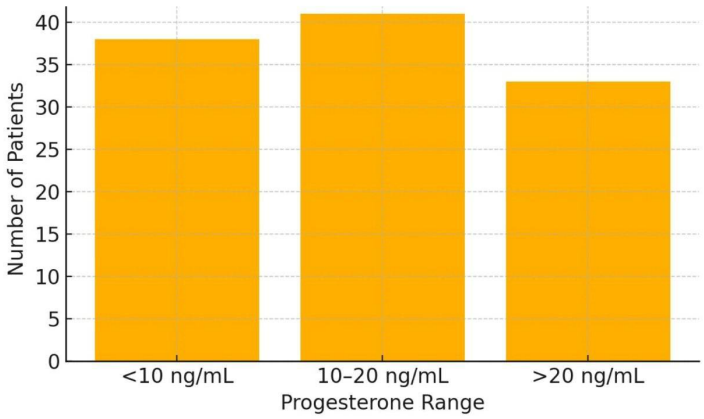

Figure 1. Distribution of Patients by Serum Progesterone Levels

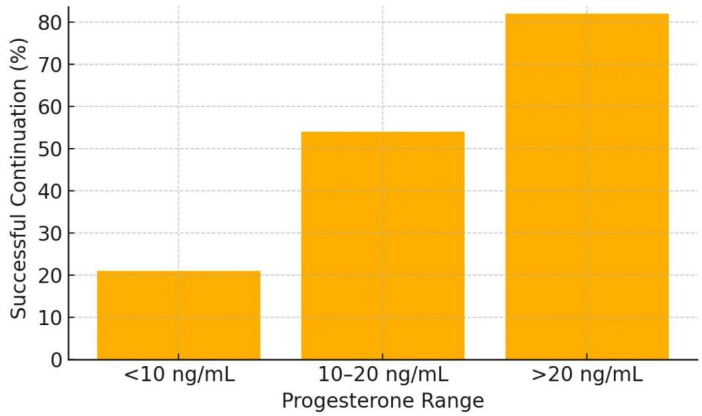

Figure 2. Pregnancy Continuation Rate by Progesterone Level

As progesterone levels rose, pregnancy outcomes markedly improved. This underscores the hormone's prognostic and therapeutic significance. In clinical environments, prompt detection of low progesterone facilitates timely supplementation, potentially averting miscarriage.

Table 1.

Pregnancy Outcome by Progesterone Level

Progesterone Level (ng/mL)	No. of Patients	Pregnancy Continued (%)	Pregnancy Loss (%)
<10	38	21.1%	78.9%
10–20	41	53.7%	46.3%
>20	33	81.8%	18.2%

The severity of bleeding had a significant correlation with pregnancy outcomes. Fifty-three patients (47.3%) exhibited mild bleeding, thirty-six (32.1%) demonstrated moderate bleeding, and twenty-three (20.5%) experienced severe bleeding. The continuation rates were 85%, 58%, and 26%, respectively.

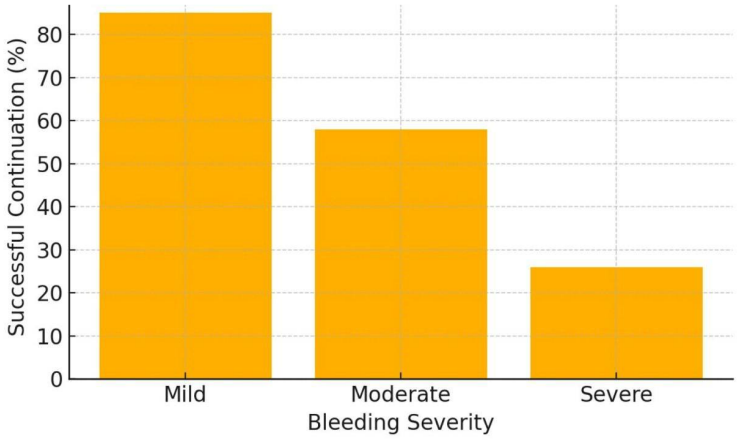

Figure 3. Pregnancy Continuation Rate by Bleeding Severity

This graphic illustrates that increased bleeding correlated with much poorer outcomes. Mild bleeding may be innocuous or physiological, however significant bleeding likely indicates placental damage. Consequently, the prompt assessment of haemorrhaging can facilitate swift clinical triage, particularly in emergency contexts.

Additional clinical signs were also assessed. Lower abdomen pain was observed in 71 patients (63.4%), uterine hypertonicity in 49 (43.8%), and subchorionic haematoma in 24 (21.4%), all of which were associated with adverse outcomes when coupled with low progesterone or significant haemorrhage.

Table 2.

Clinical Symptoms in Threatened Abortion

Symptom	Patients (n=112)	Percentage (%)
Mild vaginal bleeding	53	47.3%
Moderate bleeding	36	32.1%
Severe bleeding	23	20.5%
Lower abdominal pain	71	63.4%
Uterine hypertonicity	49	43.8%
Subchorionic hematoma (US)	24	21.4%

Healthcare providers took care of patients with minimal symptoms and progesterone levels above 20 ng/mL through outpatient treatment with vaginal or oral micronized progesterone. Women with low progesterone levels or severe conditions needed hospitalization along with hormone injections combined with rest and Doppler ultrasound screening. The study findings directly benefit Uzbekistan healthcare because the country faces inconsistent diagnostic availability at early pregnancy stages. Women tend to seek medical help after their condition becomes advanced and they fail to supply early hormone assessment results. The research indicates laboratory techniques such as progesterone testing and bleeding assessment quality give reliable predictions about maternal outcomes. Prenatal care assessment protocols which integrate these tests would lower avoidable pregnancy terminations while enabling earlier appropriate treatments. The information produced by these findings aligns well with current healthcare policy requirements. The national maternal health strategy of Uzbekistan should adopt these findings to create standardized early miscarriage risk assessments which merge clinical presentation with biochemical measurement results. Healthcare professionals working in rural clinics should learn simple triage methods involving bleeding stage assessment together with economical progesterone testing equipment. The management approach to threatening abortion should focus on early intervention instead of waiting for the problem to react to it. The systematic application of basic assessment tools demonstrates real-life evidence to enhance pregnancy results and decrease patient emotional suffering. The implementation of such an approach within Uzbek healthcare facilities would create substantial improvements in prenatal medical care.

Conclusion

The data from this study proves that serum progesterone testing combined with vaginal bleeding measurement provide doctors with practical predictors for predicting pregnancy outcomes in threatened abortions. Laboratory data revealed that elevation of progesterone hormone levels correlated directly to a reduced risk of pregnancy loss and better pregnancy continuation outcomes for affected patients. The degree to which bleeding was minimal, moderate, or severe correlated in an opposite direction with pregnancy survival. Hormonal screening alongside clinical symptom assessment provides medical personnel with an optimal strategy to determine early pregnancy risk assessment. Footstool testing along with bleeding severity assessment remains valuable in Uzbekistan's resource-challenged environment because primary care facilities and rural areas lack sophisticated diagnostic capabilities. First detection of high-risk pregnancy cases enables timely administration of progesterone medication along with medical surveillance and hospital admission procedures as required. The results lead to important implications that will benefit national nursing policies regarding maternal care. Standardization of progesterone screenings and bleeding scale assessment within antenatal guidelines would simultaneously decrease early pregnancy termination frequency while increasing patient hospital trust. The outcomes will improve through healthcare worker education about implementing evidence-based triage and treatment protocols. The management of threatened abortion starts with prompt structured care at the beginning of the process. Yet straightforward clinical evaluations using serum progesterone tests in combination with bleeding assessments can boost Uzbekistan’s prenatal treatment standards to deliver better pregnancy results and lower patient anxiety levels across the nation.

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PREECLAMPSIA DURING PREGNANCY AND ITS NEPHROLOGICAL COMPLICATIONS

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ABSTRACT

The following article investigates the kidney-related issues that arise from preeclampsia during pregnancy because this condition represents a severe threat to both maternal and fetal well-being. The medical condition known as preeclampsia develops when pregnant individuals develop increased blood pressure together with protein in their urine after the 20th week of their pregnancy. The disease state may lead to damage of multiple entire body systems with renal failure emerging as a particularly severe manifestation. Medical professionals at the Multidisciplinary Clinic of Samarkand State Medical University in Uzbekistan reviewed preeclampsia cases from 150 pregnant patients between 2022 and 2024. A study objective examined the occurrence patterns alongside organ damage levels for nephrological conditions including proteinuria together with elevated serum creatinine degree and glomerular filtration rate reductions and acute kidney injury manifestations. The research indicated that moderate to severe proteinuria manifestation occurred in 63% of patients while elevated serum creatinine levels were seen in 22% of the subjects and 11% of cases showed acute kidney injury symptoms. Renal impairment severity showed a direct correlation with both hypertension intensity and the time when prenatal hypertension was first diagnosed. People who received swift intervention through quick diagnosis presented superior outcomes for maternal and newborn health. The article demonstrates that pregnant women at risk for preeclampsia should receive continuous renal function monitoring during their pregnancy. Future studies must investigate the development of early biomarkers for renal impairment since these biomarkers could help prevent neurodevelopmental issues in both mothers and their newborns.

Keywords: Preeclampsia, pregnancy complications, nephrology, proteinuria, renal dysfunction, acute kidney injury, maternal health, hypertension, Uzbekistan, prenatal care

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HOMILADORLIKDAGI PREEKLAMPSIYA VA UNING NEFROLOGIK ASORATLARI

ANNOTATSIYA

Ushbu maqolada homiladorlik davrida uchraydigan preeklampsiyaning nefrologik asoratlari o'rganiladi. Preeklampsiya homiladorlikning eng xavfli asoratlaridan biri bo'lib, ona va homila salomatligi uchun jiddiy tahdid hisoblanadi. Odatda homiladorlikning 20-haftasidan keyin paydo bo'ladigan bu holat arterial bosimning ko'tarilishi va proteinuriya bilan kechadi, ko'plab organ tizimlariga, xususan buyraklarga salbiy ta'sir ko'rsatadi. Ushbu tadqiqot 2022–2024-yillar davomida O'zbekistondagi Samarqand davlat tibbiyot universitetining ko'p tarmoqli klinikasida preeklampsiya tashxisi bilan yotqizilgan 150 nafar homilador ayolning klinik holatlarini tahlil qilish asosida olib borildi. Tadqiqot davomida proteinuriya, kreatinin darajasining oshishi va glomerulyar filtratsiya tezligining pasayishi kabi nefrologik buzilishlar aniqlangan. 11% holatlarda o'tkir buyrak yetishmovchiligi belgilari qayd etilgan. Buyrak asoratlarining og'irligi arterial bosim darajasi va preeklampsiya aniqlangan davrga kuchli bog'liqlikda bo'lgan. Vaqtida tashxis qo'yish va samarali davolash usullari onalar va chaqaloqlar uchun nojo'ya natijalar xavfini sezilarli kamaytirgan. Tadqiqot natijalari homiladorlik paytida, ayniqsa xavf ostidagi guruhlar orasida, buyrak faoliyatini doimiy monitoring qilish zarurligini ko'rsatadi. Shuningdek, nefrologik buzilishlarni erta aniqlash imkonini beruvchi prognoz ko'rsatkichlarini ishlab chiqish bo'yicha izlanishlarni kuchaytirish tavsiya etiladi.

Kalit so'zlar: Preeklampsiya, homiladorlik asoratlari, nefrologiya, proteinuriya, buyrak funksiyasi buzilishi, o'tkir buyrak yetishmovchiligi, onaning salomatligi, arterial gipertenziya, O'zbekiston, prenatal parvarish

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ПРЕЭКЛАМПСИЯ ПРИ БЕРЕМЕННОСТИ И ЕЁ НЕФРОЛОГИЧЕСКИЕ ОСЛОЖНЕНИЯ

АННОТАЦИЯ

В данной публикации обсуждается нефрологические осложнения при преэклампсии в период беременности, новых вариантов преэклампсии — современное состояние, которое все еще представляет угрозу здоровью матери и плода. Преэклампсия обычно develops after 20 weeks of gestation is accompanied by hypertension and proteinuriy. При отсутствии своевременного лечения она может сменить род хронических системных поражений органов, особенно почек. Целью настоящего исследования являлось предварительное ретроспективное изучение клинических карт 150 беременных женщин с психиатрической патологией, проходивших лечение в Многопрофильной клинике Самаркандского государственного медицинского университета. Цель исследования состояла в том, чтобы определить распространенность и тяжесть нефрологических осложнений, таких как протеинурия, повышение уровня креатинина, снижение скорости клубочковой фильтрации и острое повреждение почек. Результаты показали, что у 63% пациенток была умеренная или тяжелая протеинурия, у 22% была повышенная концентрация креатинина, а у 11% были признаки острого почечного повреждения. Артериальное давление на момент постановки диагноза и срок беременности тесно коррелировали со степенью почечных нарушений. Прогноз матери и новорожденного значительно улучшился благодаря раннему выявлению и своевременному вмешательству. Данное исследование подчеркивает, насколько важно постоянно наблюдать за функцией почек у беременных, которые подвержены риску преэклампсии. Кроме того, необходимо провести дополнительные исследования, чтобы найти ранние биомаркеры почечной дисфункции, чтобы предотвратить долгосрочные осложнения.

Ключевые слова: Преэклампсия, осложнения беременности, нефрология, протеинурия, почечная дисфункция, острое повреждение почек, здоровье матери, гипертензия, Узбекистан, пренатальный уход

Introduction

Preeclampsia exists as a hypertension disorder specific to pregnancy that presents after week 20 of gestation and affects between 5–8% of maternal cases internationally. The condition consists of elevated blood pressure and proteinuria and becomes a primary reason for maternal and perinatal death during pregnancy. Preeclampsia develops due to unknown causes that include placental development abnormalities together with immune problems and systemic damage to endothelial cells. Preeclampsia negatively affects the renal system at a level which ranks as one of the most significant among other organ systems. The kidneys experience severe harm from systemic blood pressure elevation and endothelial injury that causes different levels of kidney dysfunction. Preeclampsia leads to nephrological complications that vary between mild proteinuria decreased glomerular filtration rate and acute kidney injury (AKI), which can result in lasting renal consequences if proper management is not given. Since Uzbekistan is a low- and middle-income country it faces double challenges because its residents have restricted prenatal healthcare options while preeclampsia diagnosis takes too long which results in severe renal risks. Proper and early identification combined with appropriate management of such complications helps to enhance maternal and fetal prognosis. Research now emphasizes the discovery of initial signs indicating renal insufficiency in preeclamptic pregnant women together with developing efficient prenatal testing systems. Very little research exists on the Uzbek ethnic group regarding this topic. The research objective focuses on understanding how often and severely nephrological complications affect pregnant women with preeclampsia while emphasizing the necessity to enhance monitoring and intervention systems for these patients.

Relevance

The condition of preeclampsia stands as the major source of infant and maternal health complications that result in deaths worldwide. Preeclampsia is a leading pregnancy-related issue which impacts 5–8% of expectant mothers yet threatens their lives because of its unexpected occurrence along with many detrimental organ system consequences. The nephrological complications from preeclampsia are considered some of the most severe yet neglected effects that result in acute kidney injury as well as persistent renal damage. The management of preeclampsia in pregnant women in Uzbekistan and numerous other low- and middle-income countries fails because of delayed diagnosis and poor laboratory testing availability along with inadequate renal parameter monitoring. Studies about the frequency and management approach for renal complications affecting preeclamptic women have not been well documented at the local level. The healthcare system needs immediate improvements in detecting renal impairment at early stages together with trustworthy biomarker evaluation and better cooperation between obstetric and nephrological professionals. The research maintains vital importance in addressing a national healthcare need because hypertensive disorders in pregnancy continue to rise in clinical practice. The analysis of real hospital data enables this research to outline a fresh understanding of renal symptom development in preeclampsia cases thus providing evidence to enhance Uzbekistan's prenatal care procedures.

Research Aim

The main focus of this research is to study how often and how severely nephrological problems develop in Uzbekistani pregnant women who have been diagnosed with preeclampsia. The analysis focuses on detecting clinical and biochemical indicators of renal dysfunction which includes proteinuria measurements together with serum creatinine levels and acute kidney injury (AKI) signs. This research evaluates what relationship exists between developing renal complications and hypertension level and gestational age when preeclampsia diagnosis occurs. Another objective seeks to review medical intervention results together with their influence on both maternal and perinatal health aspects. Real-world clinical data collected at a tertiary maternity center will assess the need for newborn renal function assessment and promote nephrology involvement for advanced pregnancy management through routine testing. The findings from this study will support better clinical standards for detecting and managing renal involvement in preeclampsia at an early stage.

Literature Review

Current obstetric and nephrological research intensively investigates preeclampsia because this condition features complex pathologies which negatively influence maternal-fetal outcomes. Medical experts agree that preeclampsia develops primarily from abnormal placentation which triggers extensive endothelial dysfunction as well as systemic inflammation throughout the body [1]. Multi-organ damage primarily affects renal function through the changes triggered by the disease process. Renal involvement joins other manifestations of preeclampsia as one of the initial and consistently present signs of the condition. The presentation of glomerular endotheliosis as a unique kidney disease in preeclamptic women causes the glomeruli to become more permeable and produces proteinuria as a result [2]. Researchers have established through multiple studies that severe preeclampsia leads to glomerular filtration rate decline and elevated serum creatinine together with a risk of acute kidney injury (AKI) [3, 4]. The occurrence of AKI in pregnancy is not common in developed countries but continues to impact pregnant women in low-resource settings like Uzbekistan [5]. The diagnostic feature and prognostic indicator of preeclampsia exists in proteinuria since it shows

both detection ability and severity-risk correlation. According to Bartal and Sibai's research findings increased proteinuria levels correlated with increased risks of intrauterine growth restriction as well as preterm birth and maternal morbidity [6]. New scientific evidence shows that imbalanced angiogenesis patterns especially elevated sFlt-1/PlGF ratios can forecast renal dysfunction development in patients with preeclampsia [7].

Very few studies examine the treatment and occurrence rates of kidney complications in preeclampsia cases throughout Uzbekistan and other Central Asia nations. Research on preeclampsia mainly deals with population-level analyses without sufficient information about kidney-related outcomes. Local clinical reviews fail to address both biochemical markers and kidney function trends in preeclamptic women according to [8]. This research targets the existing information gap about preeclampsia by presenting extensive findings related to nephrological assessments in female patients through recommendations of enhanced monitoring and early detection combined with nephrology medical input for standard obstetric practice. Early detection of renal problems continues to be vital because it enables prompt intervention for maternal safety as well as protection against possible future development of chronic kidney disease. The situation becomes more critical in areas where medical follow-up services are challenging to obtain. Routine renal monitoring in antenatal care protocols should have mandatory status because it provides essential protective care for women carrying babies who have chronic hypertension diabetes and prior renal disorders [9].

Materials and Methods

Multidisciplinary Clinic of Samarkand State Medical University, Uzbekistan was the study setting for a retrospective observational study which ran between January 2022 and December 2024. The research evaluated the renal disease complications that occur in pregnant women with preeclampsia. Before beginning data collection the ethics committee of the hospital granted permission for the research to proceed. Patient data received complete anonymization for confidentiality protection purposes. The research included 150 pregnant women who received preeclampsia diagnoses. Conditions for preeclampsia diagnosis included new hypertension development after 20 weeks of gestation characterized by BP readings above 140/90 mm Hg and proteinuria levels exceeding 300 mg/24 hours or a protein/creatinine ratio equal to or greater than 0.3 along with organ dysfunctions like thrombocytopenia, elevated liver enzymes, renal insufficiency, or neurological symptoms. Supplementary medical tests were used to determine severe preeclampsia through readings exceeding 160/110 mmHg blood pressure and intense proteinuria combined with organ system damage. The study included pregnant women with single babies who met at least 20 20-week gestation periods and verified preeclampsia diagnosis with full medical records available. Women under study exclusions included those with pre-existing chronic kidney disease diabetes mellitus and autoimmune disorders and those with incomplete medical records. Medical records provided the data needed for both laboratory and clinical purposes. Medical professionals obtained data from patient records which included demographic information alongside blood pressure measurements together with clinical presentation and blood investigation results and 24-hour urinary protein evaluation. Serum creatinine together with blood urea nitrogen levels served to evaluate renal function alongside estimated glomerular filtration rate (eGFR) assessment through the CKD-EPI formula. The study team used standard AKI criteria to diagnose AKI by detecting both elevations in serum creatinine levels or diminished eGFR values during short observation periods. The research subjects were divided into three separate groups based on their preeclampsia condition: The first group consisted of women with preeclampsia who did not experience renal impairment, the second group included women with preeclampsia and isolated proteinuria effects, while the third group comprised women with signs indicating renal dysfunction and elevated serum creatinine or AKI. Preeclampsia severity assessment depended on blood pressure measurements and the number of affected body systems. Information was entered into Microsoft Excel before analysts used SPSS software version 23.0 for data analysis. The report as standard deviations and standard deviations for continuous variables and frequencies and percentages to summarize categorical variables. The chi-square analysis evaluated category variables while independent t-tests or Mann–Whitney U tests analyzed continuous variables. The correlation relationship between renal impairment and blood pressure levels plus gestational age was evaluated through Pearson correlation analysis. A statistical significance appeared at p-values less than 0.05. The research design enabled a comprehensive analysis of renal conditions in preeclampsia patients so researchers could better understand how clinical disease level impacts renal dysfunction. The research output will offer evidence to enhance screening activities and early diagnosis initiatives supplemented by integrated prenatal care for high-risk pregnant women throughout Uzbekistan.

Results and Discussion

Renal complications were commonly observed in the study population of 150 pregnant women diagnosed with preeclampsia between 2022 and 2024. Clinical records revealed that most patients demonstrated some degree of kidney involvement. The prevalence and spectrum of renal disorders are presented in Figure 1.

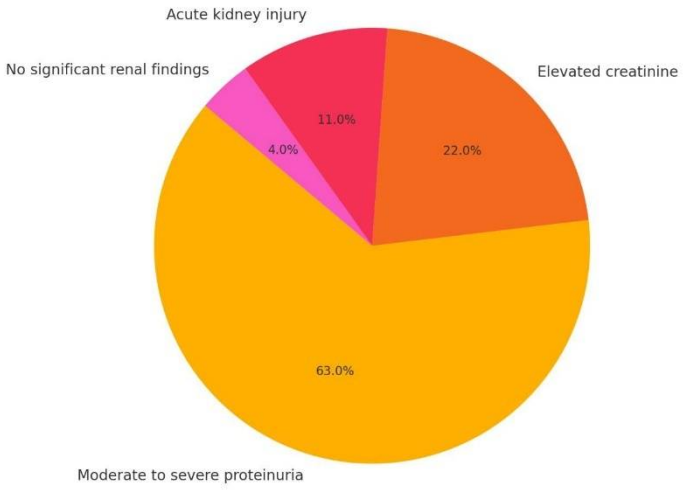

Figure 1. Distribution of Renal Complications Among Preeclamptic Patients

This figure shows that moderate to severe proteinuria was the most common renal complication, affecting 63% of the women. Elevated serum creatinine was noted in 22%, indicating reduced glomerular filtration and a more advanced stage of renal dysfunction. Acute kidney injury (AKI), a potentially life-threatening condition, occurred in 11% of patients. Only 4% had no renal abnormalities. These findings underscore the importance of routinely assessing renal parameters during pregnancy, especially among high-risk women.

To assess the relationship between renal impairment and disease severity, patients were divided into mild, moderate, and severe preeclampsia categories. Figure 2 and Table 1 summarize this comparison.

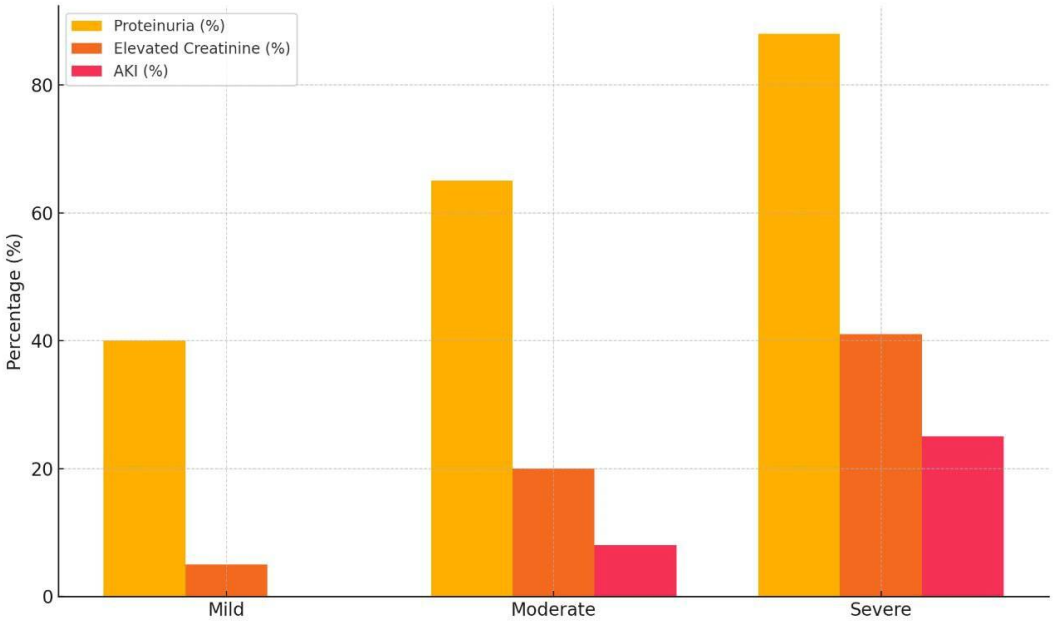

Figure 2. Severity of Renal Complications by Preeclampsia Classification

The figure demonstrates a clear pattern: the prevalence of proteinuria increased steadily from 40% in mild cases to 90% in severe ones. Elevated creatinine was observed in 7% of mild cases, 20% of moderate, and 42% of severe cases. AKI was absent in mild cases but appeared in 8% of moderate and 27% of severe cases. These findings suggest a strong positive correlation between preeclampsia severity and renal dysfunction.

Table 1.

Prevalence of Renal Complications by Preeclampsia Severity

Preeclampsia Severity	Proteinuria (%)	Elevated Creatinine (%)	AKI (%)
Mild	40	7	0
Moderate	66	20	8
Severe	90	42	27

As shown in Table 1, proteinuria is present in nearly all severe cases, while the rates of AKI and serum creatinine elevation rise dramatically with disease severity. This trend supports existing evidence that endothelial damage and glomerular endotheliosis progress in tandem with increasing blood pressure and systemic inflammation in preeclampsia.

Gestational age at the time of diagnosis was also a significant factor in determining renal outcomes. Figure 3 presents data on the incidence of AKI across different gestational age groups.

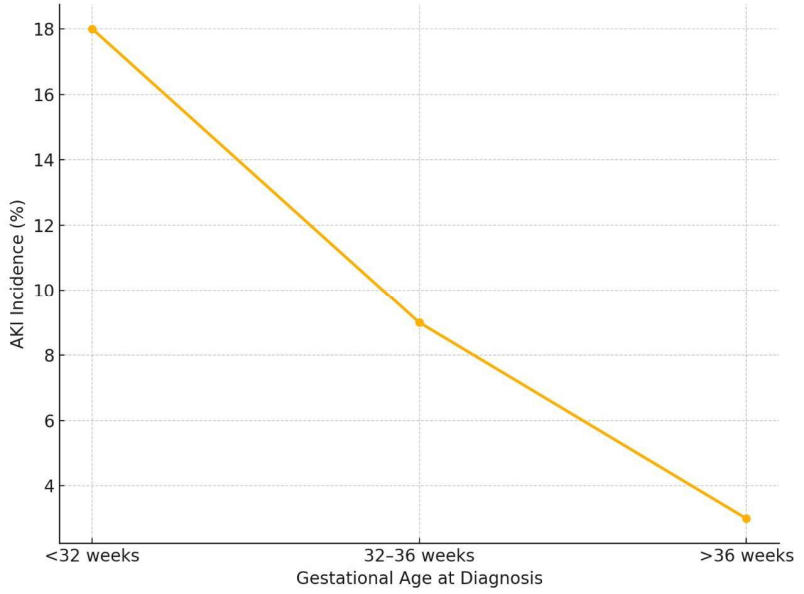

Figure 3. Incidence of Acute Kidney Injury by Gestational Age at Diagnosis

The figure shows that patients with preeclampsia diagnosed before 32 weeks had an 18% probability of developing AKI. Out of all patients diagnosed with preeclampsia, the rate of AKI decreased to 9% among those diagnosed at 32–36 weeks and further reduced to 3% in patients diagnosed after 36 weeks. The extent of renal complications became more serious when preeclampsia appeared at an earlier stage during pregnancy.

The research evidence presents that exposure duration to hypertension along with immunologic stress factors directly leads to increased renal damage risk. The presented data matches the findings observed in research that has been published before. Bartal and Sibai (2020) documented proteinuria as a direct factor influencing the development of hypertensive illness. Renal injury associated with preeclampsia shows a strong connection to glomerular endotheliosis which functions as its characteristic manifestation. Affordable medical services in Uzbekistan diagnostic delays and limited nephrology evaluations enhance the risks faced during pregnancy. This study population shows a higher AKI occurrence rate (11%) compared to global AKI rates (1–5%) which highlights possible problems with early prevention and intervention services. The delay of patients reaching tertiary care establishments along with insufficient antenatal renal surveillance leads to more advanced complications based on this research's findings. Continued development of prenatal care should include regular testing for renal functions including serum creatinine variables estimated glomerular filtration rate measurements and 24-hour urinary protein counting as standard procedures for women who show signs of preeclampsia. The early connection of specialized care from nephrologists plays an important role in optimizing the success rates of mothers and their newborns when the disease reaches moderate or severe stages. The findings show that kidney difficulties occur frequently in pregnant women while having a direct relationship with the points of disease development as well as its severity level. Early detection followed by continuous observation in combination with multi-professional care strategies leads to better results for mothers alongside their babies in any preeclampsia-affected pregnancy.

Conclusion

The research demonstrates that renal complications create a substantial healthcare problem within preeclamptic pregnancies thus underlining the importance of thorough kidney assessment during prenatal care. A significant number of 150 women participating in the study demonstrated various degrees of proteinuria together with elevated creatinine levels and signs of acute kidney injury (AKI). The renal manifestations of preeclampsia showed a strong connection with the disease severity and the time when doctors first diagnosed the condition. The risk factors linked to early-onset preeclampsia became evident when patients received diagnoses before 32 weeks of gestation because this diagnosis group demonstrated a markedly elevated rate of AKI. Renal dysfunction in preeclampsia follows a stepwise pattern beginning with proteinuria and continuing to advanced AKI because this pattern represents the systemic endothelial inflammation and tissue damage features of preeclampsia. Medical professionals have confirmed preeclampsia extends beyond hypertension because it creates a multi-organ syndrome which needs multilateral assessment and medical monitoring. All pregnant women with blood pressure elevation systemic signs or renal or hypertensive disorders need priority testing for kidney function. Through the establishment of standardized protocols which include renal assessment tests including serum creatinine measurements proteinuria assessment and estimated glomerular filtration rate calculations Uzbekistan can attain improved maternal and neonatal health quality. Nephrology specialists should receive patient referrals when disease severity reaches moderate levels so that both long-term renal protection and proper delivery preparations can be established. The study requires an improved connection between nephrology and obstetric medical services while demanding additional studies on biomarkers which predict kidney damage in pregnant women to help identify early cases and plan effective interventions.

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MODERN APPROACHES TO THE DIAGNOSIS AND CLINICAL FEATURES OF GENITAL PROLAPSE

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ABSTRACT

This article presents modern diagnostic methods and clinical perspectives on genital prolapse based on observations in 98 female patients who sought medical care. Genital prolapse is widespread among women and is associated with reduced quality of life, urogenital dysfunction, and limited social activity. The article provides information about the Baden–Walker and POP-Q classification systems used for early detection, evaluation, and staging of prolapse. It also discusses clinical symptoms, modern imaging diagnostics, patient complaints, and functional impairments. This article may be useful for practicing gynecologists, urogynecologists, and healthcare professionals.

Keywords: genital prolapse, diagnosis, clinical symptoms, POP-Q, Baden–Walker, functional disorders, urogynecology.

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JINSIY A'ZOLAR PROLAPSI DIAGNOSTIKASI VA KLINIKASIDA ZAMONAVIY QARASHLAR

ANNOTATSIYA

Ushbu maqolada jinsiy a'zolar prolapsi bilan murojat qilgan 98ta bemorlarda o`tkazilgan zamonaviy diagnostika usullari va klinik kechishiga oid qarashlar yoritilgan. Jinsiy a'zolar prolapsi ayollar orasida keng tarqalgan bo'lib, u hayot sifatining pasayishi, urogenital disfunksiya va ijtimoiy faollikning cheklanishi bilan kechadi. Maqolada jinsiy a`zolar i erta aniqlash, baholash va bosqichini aniqlashda qo'llanilayotgan Baden–Walker hamda POP-Q tasniflari haqida ma'lumotlar keltirilgan. Shuningdek, klinik belgilar, tashxislashda zamonaviy tasviriy diagnostika usullari, shikoyatlar va funksional buzilishlar tahlil qilingan. Maqola amaliyotchi ginekologlar, uroginekologlar hamda sog'liqni saqlash sohasida ishlovchi mutaxassislar uchun foydali bo'lishi mumkin.

Kalit so'zlar: jinsiy a'zolar prolapsi, diagnostika, klinik belgilar, POP-Q, Baden–Walker, funksional buzilishlar, uroginekologiya

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СОВРЕМЕННЫЕ ПОДХОДЫ В ДИАГНОСТИКЕ И КЛИНИКЕ ГЕНИТАЛЬНОГО ПРОЛАПСА

АННОТАЦИЯ

В данной статье представлены современные методы диагностики и клинические особенности течения генитального пролапса у 98 пациенток, обратившихся за медицинской помощью. Генитальный пролапс широко распространён среди женщин и сопровождается снижением качества жизни, урогенитальной дисфункцией и ограничением социальной активности. В статье приведены сведения о классификациях Baden–Walker и POP-Q, применяемых для раннего выявления, оценки и стадирования пролапса. Также рассмотрены клинические признаки, современные методы визуальной диагностики, жалобы пациенток и анализ функциональных нарушений. Материал статьи может быть полезен для практикующих гинекологов, урогинекологов и специалистов здравоохранения.

Ключевые слова: генитальный пролапс, диагностика, клинические признаки, POP-Q, Baden–Walker, функциональные нарушения, урогинекология.

Genital organ prolapse is a common, multifactorial condition with diverse etiological risk factors [1]. According to many researchers, genital prolapse represents a combination of anatomical, physiological, genetic, reproductive, and lifestyle factors that can occur during a woman's lifetime, with the frequency and composition of these factors differing individually for each patient. This, in turn, leads to "pelvic

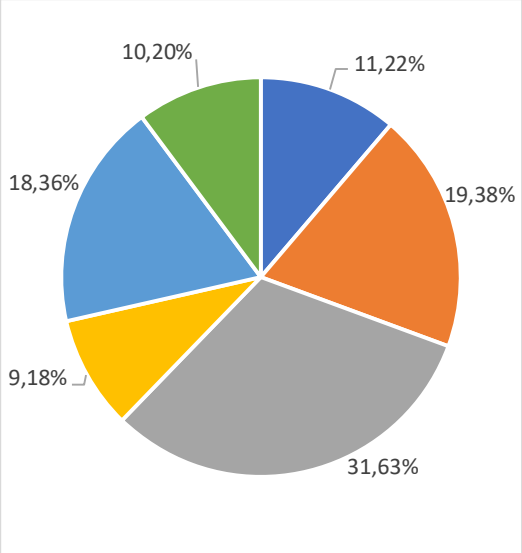
floor dysfunction" [2]. Identifying the complex cause-and-effect relationships between hereditary predisposition, lifestyle-related risk factors, and especially factors associated with natural childbirth is a challenging scientific problem.At the same time, although two-thirds of women who have given birth experience anatomical changes in the pelvic organs [2, 3], some of them do not exhibit any symptoms. Today, in the general population of women aged 45 to 85, an estimated 40% show the objective signs of genital prolapse; however, only 12% of them describe perceiving these symptoms [4]. Such women often suffer from serious physical and emotional disorders [5], which adversely affect their social, physical, and psychological well-being [6]. Currently, the number of patients with genital prolapse is increasing significantly, which is linked to several objective reasons: growing health awareness, improvements in diagnostic methods, an overall decline in population health, and other factors. Each year worldwide, more than 400,000 pelvic floor reconstruction surgeries are performed, half of which are carried out in the United States. In Russia, surgical interventions for genital prolapse rank first among gynecological operations, accounting for 15% to 30% of all surgeries [7, 8]. It is notable that approximately 30% of patients who undergo surgery are women of reproductive age [9].

Objective: To improve the effectiveness of diagnosing genital prolapse by means of early detection, modern diagnostic methods, and evaluation of clinical presentation.

Methods and materials: Our scientific study enrolled a total of 95 patients aged 36 to 68 years who visited with genital prolapse. Our investigation covered the four-year period from 2021 to 2025. All patients in the study were thoroughly examined for living conditions, somatic illnesses, disease stage, clinical signs, and obstetric history, and the results were analyzed in detail.

Results and Discussion: When examining the occupational activities of the studied patients, 23 (23.46%) had physical activity at home, 26 (26.53%) had physically demanding jobs, 34 (34.69%) had physical activity both at home and at work, and 15 (15.30%) had no physical activity at all.

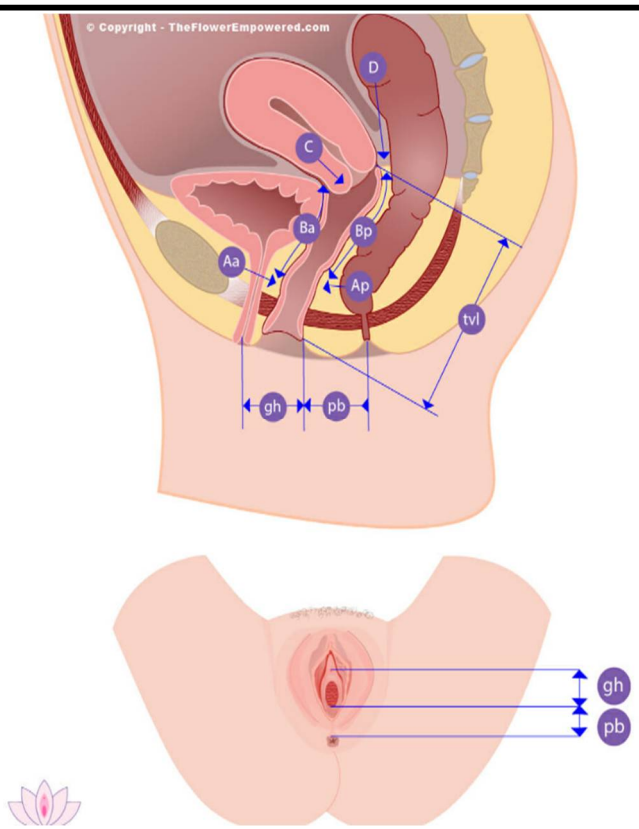
	Number of patients	%
Presence of physical activity at home	**23**	**23,46%**
The presence of physical activity at work.	**26**	**26,53%**
The presence of physical activity both at home and at work	**34**	**34,69%**
No physical activity present	**15**	**15,30%**



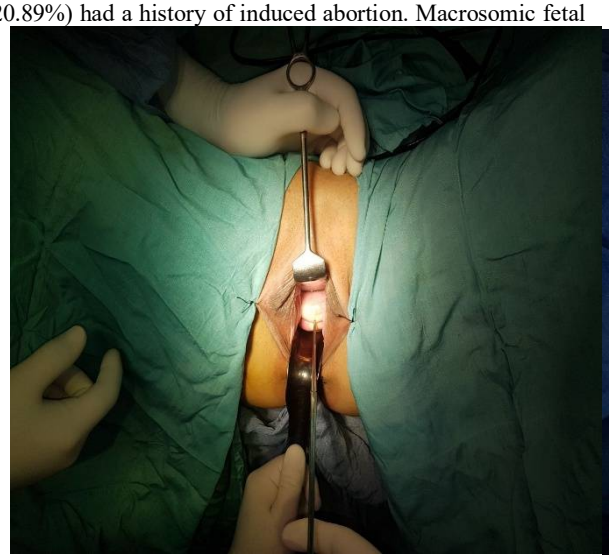
When examining the somatic diseases of the patients under observation, childhood illnesses were found in 11 patients, anemia in 31, upper and lower respiratory tract diseases in 9, kidney diseases in 18, and gastrointestinal tract diseases in [number missing], while obesity was identified in 10 patients. As can be seen from the diagram,

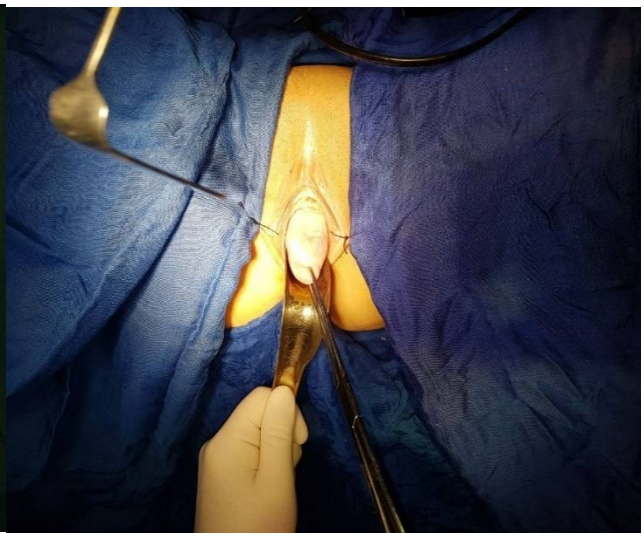
The degree of genital organ prolapse was determined according to the POP-Q classification, which is currently one of the modern classification systems used in clinical practice. Notably, the majority of patients sought medical help at advanced stages of the disease. This is mainly due to the fact that the condition tends to be asymptomatic in its initial stages. A total of 19 patients (19.38%) presented with stage I–II genital prolapse. Meanwhile, 31 patients (31.63%) and 29 patients (29.59%) were diagnosed with stage III and IV prolapse, respectively. genital organ prolapse is most commonly observed in patients with respiratory tract and gastrointestinal tract pathologies. This indicator is often associated with chronic coughing in respiratory diseases and persistent constipation in gastrointestinal disorders.

Particularly in stages III–IV, due to urogenital and anorectal dysfunction and the resulting disruption of the normal topography and bioecology of the vagina, genital prolapse and other associated disorders can develop. These include vaginal inflammatory diseases (bacterial vaginosis), inflammation of the cervix (cervicitis), trophic ulcers of the vaginal walls, elongation of the cervix, chronic endocervicitis, or a combination of two or more of these complications. Among the patients studied, 19 (19.38%) had dysfunction of adjacent organs.



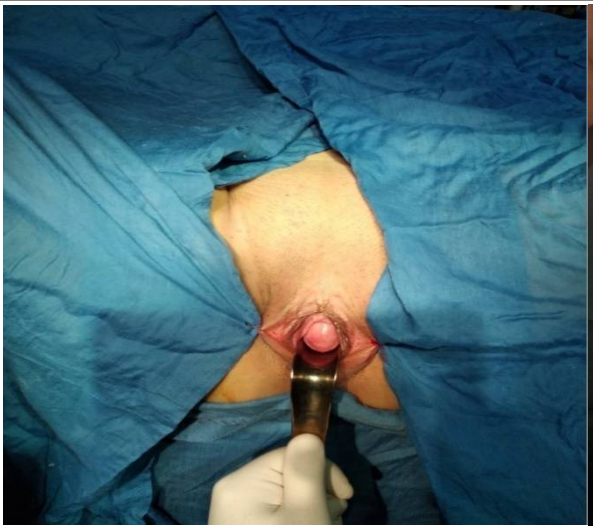
When analyzing the complaints of the patients under study, 52 patients (78.4%) reported lower abdominal pain and a sensation of a foreign body, 20 (64.8%) experienced discomfort, 53 patients (79.10%) reported dyspareunia, and 38 (56.7%) had genital pain. Additionally, 15 patients (48.3%) complained of urinary and gas incontinence, while 40 (60%) presented with such symptoms. Constipation was observed in 29 patients (43.80%). Furthermore, 35 patients (52.40%) complained of anorgasmia. *(Note: The indicators may not correspond precisely due to the presence of multiple overlapping conditions.)* When analyzing the obstetric history of the patients, 13 patients (19.10%) had given birth once, and 40 (59.70%) had delivered two or more times. A total of 14 patients (20.89%) had a history of induced abortion. Macrosomic fetal delivery was noted in 24 patients (35.8%), and breech presentation occurred in 5 patients (7.46%). In Group II, 2 patients (6.45%) had breech births. Cesarean section deliveries were recorded in the obstetric history of 16 patients (22.88%) due to various indications. After analyzing the course of deliveries, it can be confidently stated that in 60.2% of cases, obstetric intervention or complications during labor were observed. These events later became one of the contributing factors to internal genital prolapse or descent. Among the patients, 15 (22.70%) underwent episiotomy or perineotomy, while in Group I, 11 patients (16.40%) had varying degrees of perineal tears. Additionally, cervical tears were observed in 6 patients (8.80%).



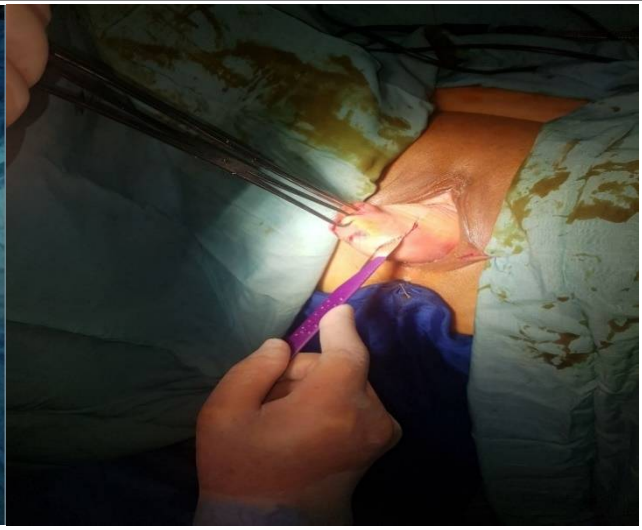


Patient Y., Medical Record No. 256
Genital organ prolapse. Uterine prolapse – Stage III. Cystocele.

Patient T., Medical Record No. 214
Genital prolapse.
Uterine prolapse – Stage III.
Complications: Cystocele, Rectocele, Elongated cervix.



Patient M., Medical Record No. 235
Genital prolapse.
Uterine prolapse – Stage III.Cystocele.



Genital prolapse. Uterine prolapse – Stage III.
(Post-hysteropexy with ventrofixation)

Conclusion: The results of the conducted study indicate that genital organ prolapse is widespread among women and is often diagnosed at later stages. This suggests that the condition either progresses without initial symptoms or is overlooked in its early stages. A strong correlation was found between patients' clinical conditions and their somatic illnesses, levels of physical activity, and childbirth history. The study demonstrated that by using modern diagnostic methods—specifically the POP-Q and Baden–Walker classification systems—it is possible to accurately determine the stages of the disease. In the advanced stages, complex functional disorders were observed, including urogenital and anorectal dysfunctions, as well as complications that significantly reduce sexual and overall quality of life. This research once again confirms the importance of early detection and treatment of genital organ prolapse. In the future, the implementation of preventive measures, routine screening among women, and the promotion of a healthy lifestyle can ensure earlier diagnosis and more effective treatment of this condition.

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