

**CLINICAL AND ANAMNESTIC FEATURES OF PATIENTS WITH ENDOMETRIAL POLYPS AND INFERTILITY****Yu. M. Tilavova, B. B. Negmadjanov, G. T. Rabbimova, V. O. Kim**  
Samarkand state medical university, Samarkand, Uzbekistan**Key words:** polyp, infertility, intrauterine pathology, endometrium, hysteroscopy.**Tayanch soʻzlar:** polip, bepushtlik, bachadon ichi patologiyasi, endometriy, gisteroskopiyasi.**Ключевые слова:** полип, бесплодие, внутриматочная патология, эндометрий, гистероскопия.

Clinical and anamnestic features of 45 patients were studied with hysteroscopic and histologically confirmed diagnosis of endometrial polyp and women without intrauterine pathology. All patients were of reproductive age from 20 to 45 years. The average age of the surveyed was 32 years, BMI 28 kg/m<sup>2</sup>, the characteristics of menstrual function, the frequency of obstetric and gynaecological surgical interventions and past gynaecological diseases were described. The clinical course was characterized by a violation of the menstrual cycle in 55% of women and infertility was observed in 100%.

**BEPUSHTLIKDA ENDOMETRIY POLIPI BOʻLGAN BEMORLARNING  
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Gisteroskopik va gistologik tasdiqlangan endometriy polipi diagnozi bilan, hamda bachadon ichi patologiyasi aniqlanmagan jami 45 nafar bemorning klinik-anamnestic xususiyatlari oʻrganildi. Barcha bemorlar reproduktiv yoshda – 20 dan 45 yosh oraligʻida edi. Ularning oʻrtacha yoshi 32 yoshni, tana vazn indeksi 28 kg/m<sup>2</sup> tashkil qilgan boʻlib, ularda hayz funksiyasining xususiyatlari, oʻtkazilgan akusher-ginekologik jarrohlik amaliyotlari va boʻlib oʻtgan ginekologik kasalliklari oʻrganildi. Kasallikning klinik kechishi 55% bemorda hayz siklining buzilishi bilan, 100 % bemorda esa bepushtlik bilan ifodalandi.

**КЛИНИКО-АНАМНЕСТИЧЕСКИЕ ОСОБЕННОСТИ ПАЦИЕНТОК С ПОЛИПАМИ ЭНДОМЕТРИЯ  
ПРИ БЕСПЛОДИИ****Ю. М. Тилавова, Б. Б. Негмаджанов, Г. Т. Раббимова, В. О. Ким**

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Изучены клинико-анамнестические особенности 45 пациенток с гистероскопически и гистологически подтвержденным диагнозом полип эндометрия и женщины без внутриматочной патологией. Все пациентки были репродуктивного возраста от 20 до 45 лет. Средний возраст обследованных составил 32 лет, ИМТ 28 кг/м<sup>2</sup>, описана характеристика менструальной функции, частота акушерско-гинекологических хирургических вмешательств и перенесенные гинекологические заболевания. Клиническое течение характеризовалось нарушением менструального цикла у 55% женщин и бесплодие наблюдалось у 100%.

**Introduction.** In recent years, endometrial polyps are a frequently detected intrauterine pathology, and in a number of scientific researches there is evidence of their effect on fertility. In the structure of gynecological diseases EP's frequency varies from 7.8% to 34.9% [1]. According to some researchers [2], most often EP occurs in the peri- and postmenopausal periods - up to 70-79%. The factors that are important for the development of EP are diverse. Some authors consider that one of the formation factors of EP is chronic inflammatory process in the endometrium [3]. Chronic inflammation of the endometrium is defined as a clinical and morphological syndrome with a set of morphofunctional transformations in the endometrium with impaired cyclic changes and receptor status. At the same time, most authors believe that chronic inflammation is based on a decrease in the body's resistance to damaging agents (bacteria, viruses, tissue breakdown products, etc.).

The term "polyp" has a foreign language origin and in translation from the Greek language ("polypus") means "many -legged". Initially, this biological term meant sedentary specimens of coelenterates [4]. According to the WHO International Classification of Tumors of the female reproductive organs (2014), EP relate to tumor-like formations. In the structure of ICD-10, EPs are located in the XIV class "Diseases of the genitourinary system" and are classified under the heading "Non-inflammatory diseases of female genital organs" with the coding of the diagno-

sis N 84.0. However, it should be noted that in the case of a polyp with areas of endometrial intraepithelial neoplasia ( EIN ) / atypical glandular hyperplasia of the endometrium, code D 07.0 is used using ICD - O code 8380/2, which belongs to ICD-10 class II "Neoplasms".

The clinical manifestations of EP are highly variable. At reproductive age, EPs cause infertility [5; 6; 7]. The most frequent manifestations of EP, regardless of age, are abnormal uterine bleeding, some patients note the appearance of leucorrhoea [8; 9]. In some cases, EPs are asymptomatic and are detected during gynecological examination and ultrasound of the pelvic organs. [10; 11].

Thus, the origin of polyps has not been yet fully identified and it is unclear by what mechanism they lead to infertility. The variety of clinical symptoms and their relationship with infertility led to the study of patients with endometrial polyps in infertility.

**Aim of the study:** to study the clinical and anamnestic features of patients with endometrial polyps with primary and secondary infertility.

**Materials and methods of research:** a study of clinical and anamnestic features of 35 patients was carried out with hysteroscopic and histologically confirmed diagnosis of endometrial polyp and 10 women without intrauterine pathology. All patients were of reproductive age from 20 to 45 years. The average age of the surveyed was 32 years, the average BMI was 28 kg/m<sup>2</sup>. According to the results of hysteroscopy, patients were studied in three groups.

Group 1 - the main group of patients - 16 women out of 35, only with endometrial polyps. At the time of examination, no other intrauterine pathologies were detected in these patients.

Group 2 - comparison group - 19 women out of 35, a combination of an endometrial polyp with other intrauterine pathologies.

Group -3 -control group - 10 women in whom at the first stage no hysteroscopic intrauterine pathologies were detected at the time of the examination. In all groups of patients, the characteristics of menstrual function, the frequency of obstetric and gynaecological surgical interventions and past gynaecological diseases are described.

**Results:** at the end of our study, the following results were obtained. Out of 45 patients, 12 (26.7%) had primary infertility, and 33 (73.3%) patients had secondary infertility (table 1).

The duration of infertility was 5±1 and 3±1 years, respectively, in groups with primary and secondary infertility.

According to Table 2, the majority of the examined women were between the ages of 33 and 36.

When studying the nature of menstrual function, it was found that the average age of menarche was 13±1 years. The appearance of the first menstruation before the age of 12 years was noted in 32 (71%) patients, at 14 years or more in 13 (29%) patients. The menstrual cycle was established in all women within 2 years. The duration of the menstrual cycle in the majority of patients 25 (55%) was in the range of 28-30 days. The duration of menstruation in 27 (60%) patients was 4 or more days.

25 (55%) women have menstrual irregularities. 4 (9%) women complained about the absence

Table 1.

General characteristics of the groups of examined patients.

	I group	II group	III group	Total
Primary infertility	4	5	3	12
Secondary infertility	12	14	7	33
<b>Total</b>	<b>16</b>	<b>19</b>	<b>10</b>	<b>45</b>

Table 2.

Distribution of surveyed women by age.

Age	20-24	25-28	29-32	33-36	37-40	41-45
<b>n (abs)</b>	5	6	9	14	8	3
<b>%</b>	11%	13%	20%	31%	17%	6%

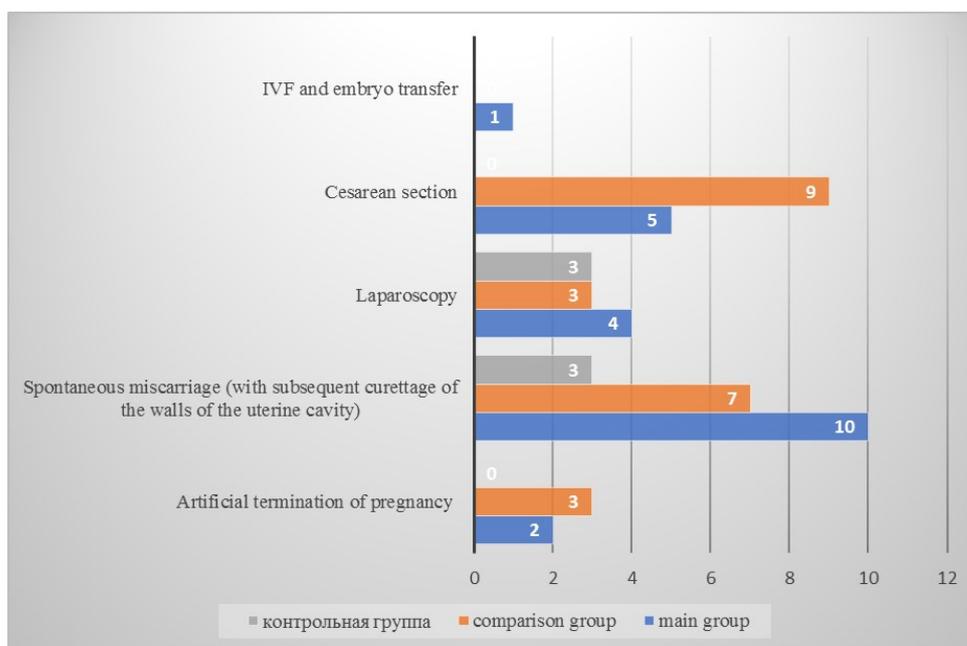


Fig. 1. The frequency of obstetric and gynaecological surgical interventions in patients with infertility.

of menstruation, 12 (27%) women complained about irregular menstruation. Heavy menstruation was noted in 27 (60%) women, scanty and spotting was noted in 13 (29%).

When studying the obstetric and gynecological history, only 16 (35%) of 45 patients with secondary infertility had a history of childbirth. A history of one birth was in 5 (31%) women, two births in 7 (44%) women, three in 4 (25%) women. Artificial termination of pregnancy was performed in 5 (11%) women. Spontaneous miscarriages in history were noted in 28 (51%) cases, of which 4 (8%) women had more than two times.

IVF and embryo transfer (ET) in history took place in one case.

34 (75%) patients had a history of various medical diagnostic and obstetric-gynecological surgical interventions before treatment. An analysis of previous obstetric and gynecological surgical interventions showed a significantly higher frequency of operations in patients of the comparison group, which is shown in Figure 1.

Some women suffered from previous gynecological diseases. Inflammatory diseases of the pelvic organs occurred in 29 (65%) women, 11 (24%) - uterine myoma, 9 (20%) - benign ovarian formations, external genital endometriosis - in 6 (13%) patients.

**Conclusion.** Thus, when studying the characteristics of menstrual function, the frequency of obstetric and gynaecological surgical interventions and past gynaecological diseases in patients with endometrial polyps, the following clinical and anamnestic features were revealed: the average age of the surveyed was 32 years, BMI 28 kg/m<sup>2</sup>, menstrual irregularities were observed in 55% of women, and infertility in 100%. 75% of patients had a history of various medical diagnostic and obstetric-gynecological surgical interventions before treatment, which can be a leading cause of the formation of local inflammation process and the endometrial hyperplasia.

**References:**

1. Айламазян, Эдуард Карпович, et al. "Особенности экспрессии рецепторов половых стероидных гормонов, провоспалительных маркеров и ингибитора циклин-зависимой киназы p16ink4a в эндометрии при наружном генитальном эндометриозе." Журнал акушерства и женских болезней 65.3 (2016).
2. Кинятова, Ш., et al. "Клинико-морфологические особенности эндометриальных полипов у женщин в возрастном аспекте." InterConf (2021): 823-832.

3. Г. Т. Раббимова, Б. Б. Негмаджанов, Н. Р. Насимова, З. С. Насимова, М. О. Сонокулова Кесар кесиш операциясидан кейин пайдо бўлган “ниша” симптоми ва бепуштлиқ // Доктор ахборотномаси, № 3 (100), 2021. С.143-148. DOI: 10.38095/2181-466X-20211003-143-148
4. Салихова, Тамара Руслановна, and Наби Султан-Мурадович Омаров. "Роль гипоксии в патогенезе развития эндометриальных полипов в постменопаузе." Современная наука: актуальные проблемы теории и практики. Серия: Естественные и технические науки 9 (2018): 88-93.
5. Al Chami, Ali, and Ertan Saridogan. "Endometrial polyps and subfertility." The Journal of Obstetrics and Gynecology of India 67.1 (2017): 9-14.
6. American Association of Gynecologic Laparoscopists (AAGL): Advancing Minimally Invasive Gynecology Worldwide. "AAGL practice report: practice guidelines for the diagnosis and management of submucous leiomyomas." Journal of minimally invasive gynecology 19.2 (2012): 152-171.
7. Balcacer, Patricia, et al. "Magnetic resonance imaging features of endometrial polyps: frequency of occurrence and interobserver reliability." Journal of computer assisted tomography 42.5 (2018): 721-726.
8. Bouet, Pierre-Emmanuel, et al. "Chronic endometritis in women with recurrent pregnancy loss and recurrent implantation failure: prevalence and role of office hysteroscopy and immunohistochemistry in diagnosis." Fertility and sterility 105.1 (2016): 106-110.
9. Cahill, Michael A., et al. "The emerging role of progesterone receptor membrane component 1 (PGRMC1) in cancer biology." Biochimica et Biophysica Acta (BBA)-Reviews on Cancer 1866.2 (2016): 339-349.
10. Centini, Gabriele, et al. "Modern operative hysteroscopy." Minerva ginecologica 68.2 (2016): 126-132.
11. Cholkeri-Singh, Aarathi, and Kirsten J. Sasaki. "Hysteroscopy for infertile women: a review." Journal of minimally invasive gynecology 22.3 (2015): 353-362.
12. Clark, T. Justin, and Helen Stevenson. "Endometrial Polyps and Abnormal Uterine Bleeding (AUB-P): What is the relationship, how are they diagnosed and how are they treated?." Best Practice & Research Clinical Obstetrics & Gynaecology 40 (2017): 89-104.
13. Doria, Pedro Leopoldo Silva, et al. "Association of IGF-1 CA (n) and IGFBP3 rs2854746 polymorphisms with endometrial polyp risk." BioMed research international 2018 (2018).
14. Drobnyazko, P. A. "PREVIEW OF FOREIGN CLINICAL GUIDELINES FOR HYSTEROSCOPY." Международный научно-исследовательский журнал (2021).
15. Fang, Rui-Li, et al. "Barcoded sequencing reveals diverse intrauterine microbiomes in patients suffering with endometrial polyps." American journal of translational research 8.3 (2016): 1581.
16. Fadare, Oluwole, Idris L. Renshaw, and Vinita Parkash. "The spectrum of morphologic alterations associated with infarction in endometrial polyps: a report of 41 cases." International Journal of Gynecological Pathology 38.1 (2019): 32-43.
17. Guo, Tao, et al. "Identifying the superior surgical procedure for endometrial polypectomy: A network meta-analysis." International Journal of Surgery 62 (2019): 28-33.
18. Horsburgh, Steven, et al. "Exercise and inflammation-related epigenetic modifications: focus on DNA methylation." Exercise immunology review 21 (2015).
19. Jeon, Se Jeong, et al. "Endometrial polyp surveillance in premenopausal breast cancer patients using tamoxifen." Obstetrics & gynecology science 60.1 (2017): 26.
20. Karakuş, S. S., et al. "Reproductive outcomes following hysteroscopic resection of endometrial polyps of different location, number and size in patients with infertility." Journal of Obstetrics and Gynaecology 36.3 (2016): 395-398.
21. Ludwin, Artur, et al. "Removal of uterine polyps: clinical management and surgical approach." Climacteric 23.4 (2020): 388-396
22. Luerti, Massimo, et al. "Effectiveness of hysteroscopic techniques for endometrial polyp removal: the Italian multicenter trial." Journal of minimally invasive gynecology 26.6 (2019): 1169-1176.
23. Malhotra, Narendra, and Nitin Shah. "Hysteroscopy and Endometrial Polyps." Hysteroscopy Simplified by Masters. Springer, Singapore, 2021. 91-98.
24. Manchanda, Rahul, and Richa Sharma. "How to Set up High-Tech Hysteroscopy Unit." Hysteroscopy Simplified by Masters. Springer, Singapore, 2021. 27-37
25. Matei, Alexandra, et al. "Insights on Hysteroscopic Procedures and Their Place in Romanian Gynecologic Practice—The Experience of Two Medical Units." Diagnostics 10.5 (2020).
26. Metello, José, and João Maires. "Uterine Polyps." Atlas of Hysteroscopy. Springer, Cham, 2020. 41-54.
27. Munro, Malcolm G., et al. "The two FIGO systems for normal and abnormal uterine bleeding symptoms and classification of causes of abnormal uterine bleeding in the reproductive years: 2018 revisions." International Journal of Gynecology & Obstetrics 143.3 (2018): 393-408.
28. Murdock, Tricia A., et al. Diagnosis of Endometrial Biopsies and Curettings: A Practical Approach. Springer, 2018.
29. Ouyang, Chensi, et al. "Malignant Endometrial Polyps in Uterine Serous Carcinoma: The Prognostic Value of Polyp Size and Lymphovascular Invasion." International Journal of Gynecologic Cancer 28.3 (2018).
30. Režňák, Lukáš, and Milan Kudela. "Comparison of ultrasound with hysteroscopic and histological findings for

- intrauterine assessment." *Biomedical Papers* (2018).
31. Safdar, Nida S., Giovanna A. Giannico, and Mohamed Mokhtar Desouki. "Utility of a standardized protocol for submitting clinically suspected endometrial polyps to the pathology laboratory." *Annals of diagnostic pathology* 23 (2016): 29-31.
  32. Salazar, Christina, et al. "Hysteroscopy: Office and Operative-Myomectomy, Polypectomy, and Adhesiolysis." *Reproductive Surgery: The Society for Reproductive Surgeons' Manual* (2018): 1.
  33. Sharma, Sangita. "Polyps: Hysteroscopic Diagnosis and Management." *Manual of Fertility Enhancing Hysteroscopy*. Springer, Singapore, 2018. 61-78
  34. Smith, Paul, and T. Justin Clark. "Hysteroscopic Endometrial Polypectomy." *Diagnostic and Operative Hysteroscopy* (2020): 118
  35. Stamenov, Georgi Stamenov, et al. "Hysteroscopy and female infertility: a fresh look to a busy corner." *Human Fertility* (2020): 1-29.
  36. Teresiński, Leszek, et al. "Assessment of morphological changes and steroid receptors in the uteri of postmenopausal women." *Histology and histopathology* 34.6 (2018): 631-644.
  37. Troncon, Júlia Kefalas, et al. "Endometrial Polyps-When Should Hysteroscopic Resection Be Performed?." *Revista Brasileira de Ginecologia e Obstetrícia* 38.7 (2016): 315-316
  38. Vander Borght, Mélodie, and Christine Wyns. "Fertility and infertility: Definition and epidemiology." *Clinical biochemistry* 62 (2018): 2-10.
  39. Wang, Yue, et al. "Prevention of Benign Endometrial Polyp Recurrence Using a Levonorgestrel-releasing Intrauterine System in Premenopausal Patients: A Retrospective Cohort Study." *Journal of Minimally Invasive Gynecology* 27.6 (2020): 1281-1286
  40. Yen, Chih-Feng, et al. "Effectiveness and appropriateness in the application of office hysteroscopy." *Journal of the Formosan Medical Association* 118.11 (2019): 1480-1487
  41. Zhang, YunZheng, et al. "Deep learning model for classifying endometrial lesions." *Journal of Translational Medicine* 19.1 (2021): 1-13.