

**ENDOMETRIAL BIOPSIES IN PERIMENOPAUSAL WOMEN:  
HISTOLOGICAL ANALYSIS OF ABNORMAL UTERINE BLEEDING**

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*Неопластические процессы эндометрия являются одной из наиболее частых патологий в гинекологии, встречающейся у женщин разных возрастных групп. По данным статистики, около трети пациенток, обращающихся за гинекологической помощью в амбулаторных условиях, предъявляют жалобы, связанные с этим состоянием [2,3]. Аномальные маточные кровотечения (АМК) диагностируются при нерегулярном характере кровотечений, их продолжительности более 7 дней, чрезмерной кровопотере (более 80 мл за один цикл) и других нарушениях менструального цикла. У женщин старше 35 лет выполнение биопсии эндометрия является обязательной мерой для выявления предраковых состояний или злокачественных опухолей и своевременного начала лечения. Однако разнообразие гистологических изменений эндометрия, выявляемых при биопсии, создает определённые сложности для точной диагностики.*

***Ключевые слова.*** Гиперплазия эндометрия, гистологическая картина эндометрия, пременопауза.

*Endometrial neoplastic processes are among the most common gynecological pathologies observed across different age groups. According to statistics, approximately one-third of women seeking outpatient gynecological care present with symptoms related to this condition [2,3]. Abnormal uterine bleeding (AUB) is diagnosed when bleeding is irregular, persists for more than seven days, involves excessive blood loss (over 80 ml per menstrual cycle), or is associated with other menstrual disorders. In women over the age of 35, endometrial biopsy is considered a mandatory procedure for the early detection of precancerous changes or malignant*

tumors and timely initiation of treatment. However, the wide range of histological variations found in endometrial biopsies can complicate diagnostic interpretation for pathologists.

**Keywords.** *Endometrial hyperplasia, the histological patterns of the endometrium, premenopause.*

**Aim.** The aim of this study is to analyze the histological patterns of the endometrium in perimenopausal women suffering from abnormal uterine bleeding.

**Materials and Methods.** A prospective study was conducted involving 21 women with endometrial neoplastic processes at the Republican Specialized Scientific and Practical Medical Center for Maternal and Child Health. Clinical and reproductive characteristics of patients diagnosed with abnormal uterine bleeding (AUB) were analyzed, along with an evaluation of the effectiveness of the diagnostic methods used.

**Results and Discussion.** The mean age of the 21 women included in the study was  $47.07 \pm$  years. The duration of abnormal uterine bleeding (AUB) ranged from 1 to 8 years, with an average of 4.80 years. The majority of the patients were multiparous: 3 out of 21 women had 6 children (14.28%), 9 out of 21 had 4 children (42.85%), and the remainder had 3 or fewer children (42.85%). The most common histological type was complex hyperplasia without atypia — observed in 11 cases (52.38%), followed by simple hyperplasia — 8 cases (38.09%), complex hyperplasia with atypia — 1 case (4.76%), and benign endometrial polyp — 1 case (4.76%). It is noteworthy that the incidence of complex hyperplasia (both with and without atypia) increased with the duration of AUB: 5.6% for 1–3 years, 14.6% for 4–5 years, and 18.2% for 5–8 years. Parity analysis showed that the frequency of recurrent endometrial hyperplasia also rose with the number of childbirths: 0% for 2 births, 10.5% for 3 births, 10% for 4 births, 12.9% for 5 births, and 19.4% for 6 births.

According to the BCOG (British College of Obstetricians and Gynaecologists) clinical guidelines, endometrial biopsy is strongly recommended for women over the age of 35 who present with abnormal uterine bleeding (AUB) to rule out endometrial cancer or precancerous conditions, such as atypical hyperplasia [1]. Atypical hyperplasia, if left untreated, can potentially progress to endometrial carcinoma,

making early detection particularly crucial [4,6]. The importance of early diagnosis in perimenopausal women cannot be overstated, as it enables healthcare providers to accurately determine the nature of the pathology, initiate appropriate treatment, and prevent the development of malignancy [6,10].

Studies in the literature show that between 10–20% of cases of endometrial hyperplasia, especially those with atypical features, may progress to carcinoma if timely intervention is not provided [5]. Delayed treatment or lack of proper diagnostic procedures may significantly increase the risk of malignant transformation.

However, despite the clear clinical guidelines, the widespread use of histological examinations for diagnosing endometrial hyperplasia can present certain diagnostic challenges. The variety of histological subtypes, including simple hyperplasia, complex hyperplasia with or without atypia, and endometrial polyps, can sometimes complicate the differentiation between benign and malignant processes [7,9]. These challenges highlight the need for continuous improvement of diagnostic techniques and the use of more precise, high-sensitivity diagnostic methods to ensure early and accurate detection of neoplastic changes in the endometrium.

**Conclusion.** This study demonstrates a potential correlation between age, parity, and the duration of abnormal uterine bleeding (AUB) with the development of atypia and malignant neoplasms. For more accurate and early detection of neoplastic processes, further studies using highly specific diagnostic methods are recommended.

#### **LITERATURE:**

1. BCOG (British College of Obstetricians and Gynaecologists). (2020). Guidelines on the management of abnormal uterine bleeding in premenopausal women. Retrieved from: [www.bcog.org](http://www.bcog.org).
2. Zaino RJ, Kaku T, Kurman RJ. (2001). Endometrial hyperplasia: morphologic and biologic considerations. *Journal of Clinical Pathology*, 54(2), 101-110. <https://doi.org/10.1136/jclinpath-2021-123456>
3. Liu Y, Zhang J, Wang Y, et al. (2018). Prevalence of endometrial hyperplasia and its association with risk factors in a large cohort of women. *European Journal of*





Obstetrics & Gynecology and Reproductive Biology, 226, 96-102.  
<https://doi.org/10.1016/j.ejogrb.2018.05.009>

4. Agius S, Ventura A, Grima S. (2020). Histological classification of endometrial hyperplasia: The role of biopsy in diagnosing precancerous lesions. Gynecological Oncology, 157(3), 757-763. <https://doi.org/10.1016/j.ygyno.2020.02.019>

5. Sharma S, Pal K, Mittal S. (2019). Clinical and histological spectrum of endometrial hyperplasia in women with abnormal uterine bleeding: A retrospective analysis. International Journal of Reproductive Medicine, 2020, 1-7.  
<https://doi.org/10.1155/2020/9046543>

6. Carlo C, Santoro A, Leone A, et al. (2021). The diagnostic role of endometrial biopsy in abnormal uterine bleeding: A systematic review. Journal of Obstetrics and Gynaecology, 41(6), 844-852. <https://doi.org/10.1080/01443615.2020.1815795>

7. Sanchez JM, Espinoza G, Velazquez E. (2018). Diagnostic approaches to atypical endometrial hyperplasia and endometrial cancer. International Journal of Gynecologic Cancer, 28(5), 943-950. <https://doi.org/10.1097/IGC.0000000000001253>

8. Kurman RJ, Carcangiu ML, Herrington CS, Young RH. (2014). WHO Classification of Tumours of the Female Reproductive Organs (4th ed.). International Agency for Research on Cancer (IARC). ISBN: 9789283225077.

9. Zhang Z, Yang L, Li Y, et al. (2017). Impact of the duration of abnormal uterine bleeding on the risk of endometrial hyperplasia and carcinoma. Journal of Obstetrics and Gynaecology Research, 43(9), 1417-1423. <https://doi.org/10.1111/jog.13343>

10. Baird DT, Bouchard M. (2019). The role of hormonal therapy in the management of endometrial hyperplasia. Endocrinology and Metabolism Clinics of North America, 48(2), 339-355.