

## Morphological Features of Ovarian Neoplasms

Sanoev Baxtiyor Abdurasulovich, Narzullaeva Oygul Muradilloevna  
Bukhara State Medical Institute

**Abstract:** The article explores the morphological features of ovarian neoplasms that belong to benign tumors and are at the borderline between benign and malignant forms (borderline neoplasms). The microscopic appearance of such tumors is often complex and differs from typical benign and malignant neoplasms, including the presence of papillary structures, various types of epithelium, and mixed pleural formations. Borderline neoplasms may exhibit some signs of cellular atypia, such as changes in cell nuclei and uneven nuclear staining. Invasive growth can also be detected in the surrounding tissues, and increased mitotic activity may indicate potential malignancy. Cystic formations and the presence of specific morphological features, such as intracavity septation and solid areas within the cyst, can also be observed in borderline neoplasms of the ovary. The description of these morphological characteristics is approximate, and an accurate diagnosis of borderline neoplasms requires a comprehensive analysis of morphological data, clinical information, and laboratory results. Knowledge of these features can aid physicians in determining the diagnosis and choosing the most appropriate treatment for patients with suspected ovarian neoplasms.

**Keywords:** morphological features, ovarian neoplasms, benign tumors, borderline neoplasms, malignant tumors.

**Relevance** The relevance of this article about the morphological features of ovarian neoplasms, including benign neoplasms that are on the verge of becoming malignant (borderline neoplasms), is due to several factors:

First, borderline ovarian neoplasms are a medical problem that requires attention and greater understanding. This is a type of tumor that causes difficulty in accurately diagnosing and determining further treatment for patients. Studies of the morphological features of these neoplasms help improve diagnostic accuracy and select the most effective treatment.

Secondly, conducting research on the morphology of ovarian tumors allows us to expand our knowledge about different types of tumors and their characteristics. This helps the scientific community and medical practitioners better understand the biology of these tumors, identify risk factors and develop more effective diagnostic and treatment strategies.

Third, such studies help improve the prognosis and predictability of outcome in patients with borderline ovarian neoplasms. Knowledge of the morphological features of these tumors can help physicians determine their grade of malignancy, predict the risk of recurrence, and make individual decisions about further treatment and monitoring.

Thus, the article is relevant because it helps expand our knowledge about the morphological features of borderline ovarian tumors, increases the accuracy of diagnosis and choice of treatment, and also helps to improve the prognosis of outcome in patients.

**Purpose of the study** The main goal of the study is to analyze and describe the microscopic structure and features of such neoplasms, as well as to identify signs that will distinguish borderline neoplasms from typical benign and malignant ovarian tumors. The study is aimed at an in-depth understanding of the pathological processes occurring in the ovary and the identification of morphological criteria for a more accurate diagnosis and prediction of the behavior of borderline neoplasms. Achieving the goal of

the study will improve the differential diagnosis and determination of the degree of malignancy of such neoplasms, thereby facilitating the selection of the most effective treatment methods and improving the prognosis for patients with borderline ovarian neoplasms.

### Materials and research methods

#### Materials:

- Ovarian tissue samples obtained from patients suffering from borderline ovarian neoplasms.
- Clinical and laboratory data of patients, including information about age, symptoms, studies and previous diagnoses.

#### Methods:

- Histological examination: Tissue samples of the ovaries were fixed, processed and histological sections were obtained. The sections were then stained with hematoxylin and eosin to visualize structural features and analyze the microscopic structure of the tumors.
  - Morphometric analysis: Using computer programs, cell size and shape, cell density and other parameters were analyzed to identify the characteristic features and differences between benign neoplasms and borderline neoplasms.
  - Immunohistochemical staining: Various antibody markers have been used to determine the type of epithelial cells, the presence of papillary structures and other morphological features of borderline neoplasms.
  - Statistical analysis: Statistical methods such as t-tests and correlation analysis were used to process and analyze the data to identify the relationship between morphological features and clinical parameters.
- These materials and methods made it possible to conduct a detailed study of the morphological features of borderline ovarian neoplasms, their microscopic structure and characteristics, and also to identify differences with benign neoplasms.

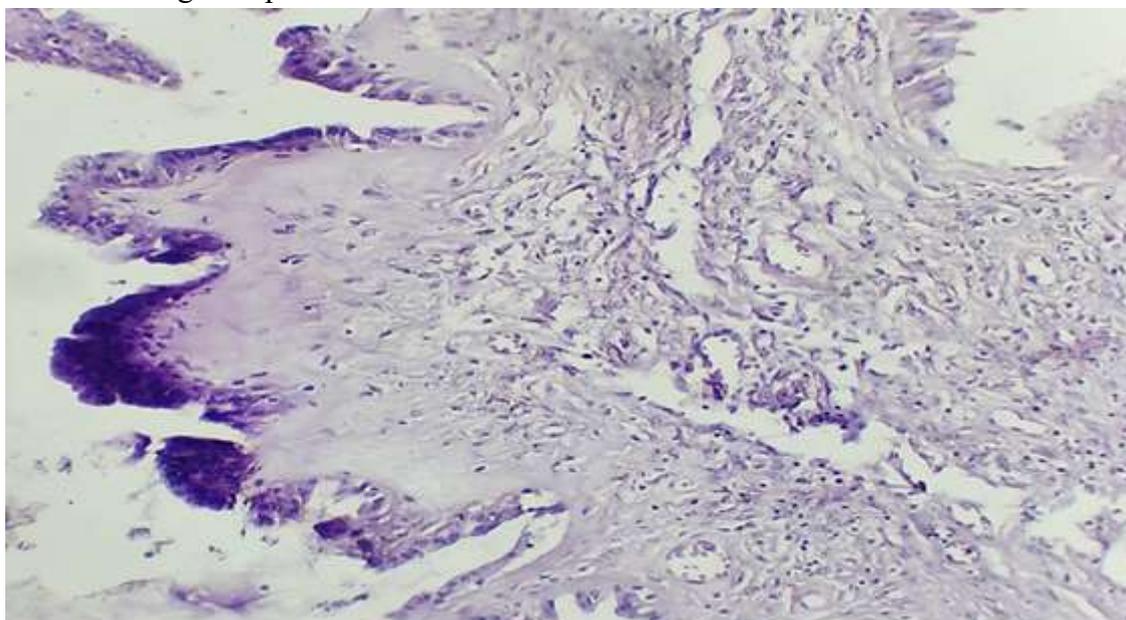


Fig 1. Borderline ovarian cystadenoma. Areas of proliferation are visible.

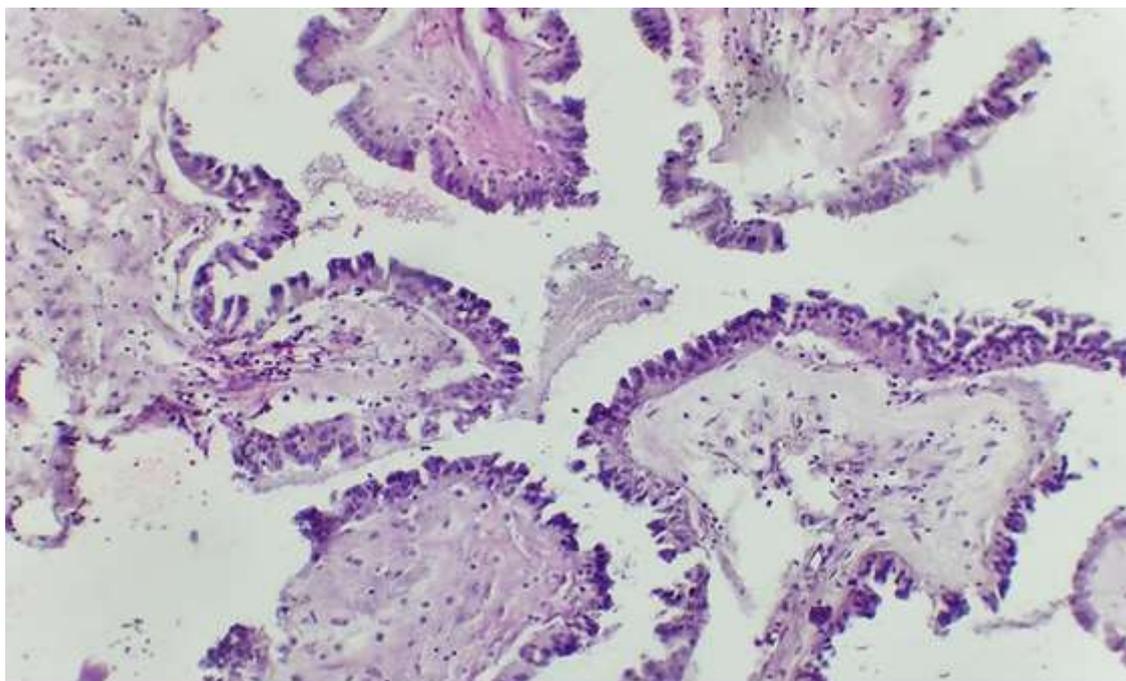


Fig 2. Borderline ovarian cystadenoma with proliferative changes.

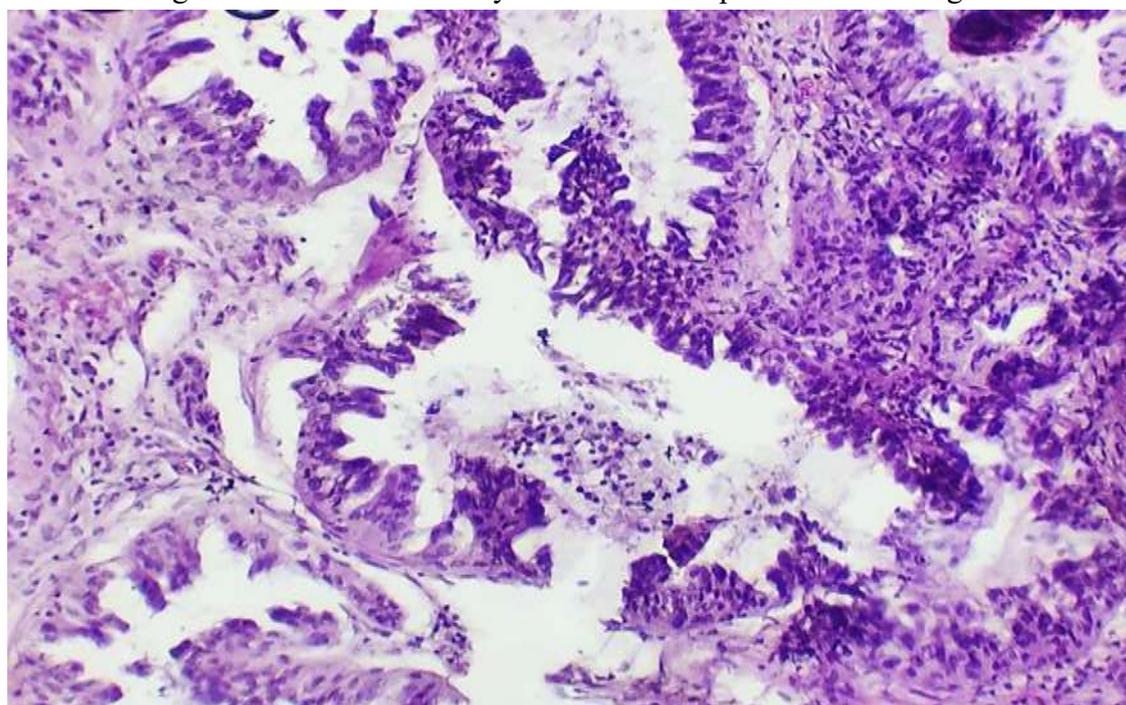


Fig 3. Borderline ovarian cystadenoma. Proliferatively changed areas with dysplasia.

### **Result and discussions**

The result of the study of cystadenomas (borderline tumors) showed the following: 1. Cystadenoma is an ovarian tumor that is located on the border between benign and malignant tumors. 2. The study found that most cystadenomas are benign and rarely develop into cancer. 3. Cystadenomas are usually found in women of reproductive age and can reach large sizes. 4. Symptoms of cystadenomas may include abdominal pain, abdominal enlargement, changes in urination and other specific symptoms related to the pressure of the tumor on surrounding organs. 5. The diagnosis of cystadenomas is usually made based on the medical picture of the tumor, examination results (including ultrasound and MRI studies) and biopsy. 6. Treatment for cystadenomas usually involves surgical removal of the tumor. The surgeon

may decide to remove just the tumor itself or the entire ovary, depending on the size and nature of the tumor.

### Conclusions

Borderline ovarian tumors may have various morphological features, such as increased cellular atypia, a more pronounced cell nucleus, poorly limited contours of tumor formations, etc. These morphological features present difficulties in their classification and require more careful medical analysis.

When we talk about borderline neoplasms, it is important to consider their potential for increased risk behavior and potential for progression to malignancy. This makes borderline neoplasms a focus of research in oncology.

### Bibliography:

1. Israilov R. I., Sanoyev B. A. AZ Olimova Pathologically Undifferentiated Placental Morphology in Primary Placental Insufficiency //American Journal of Medicine and Medical Sciences. – 2020. – Т. 10. – №. 09. – С. 660-663.
2. BA S., Israilov R. I., Djuraeva G. B. Quantitative indicators and methods for modeling structural units in placental insufficiency //World Journal of Pharmaceutical Research. – 2020. – Т. 9. – №. 12. – С. 37-47.
3. Abdurasulovich S. B. et al. Age and metastatic characteristics of mammary cancer //ResearchJet Journal of Analysis and Inventions. – 2021. – Т. 2. – №. 09. – С. 18-21.
4. Саноев Б. А., Ниёзова Т. Ш., Хикматова Н. И. Макро-и микроскопические проявления лейомиом матки //Новый день в медицине. – 2020. – №. 2. – С. 526-528.
5. Shodiyev U. M. et al. Pathologies encountered in the kidney in the practice of forensic medical examination //Academicia Globe. – 2021. – Т. 2. – №. 11. – С. 39-43.
6. Саноев Б. А., Мухидова Г. Х. МАКРОИ МИКРОСКОПИЧЕСКИЕ ПРОЯВЛЕНИЯ ПОЛИПА ЭНДОМЕТРИЯ //Oriental renaissance: Innovative, educational, natural and social sciences. – 2022. – Т. 2. – №. 2. – С. 835-840.
7. Саноев Б. А., Ниёзова Т. Ш., ПРОЯВЛЕНИЯ Н. ЛЕЙОМИОМ МАТКИ//Новый день в медицине //Номер. – 2020. – Т. 2. – С. 526-528.
8. Abdurasulovich S. B. et al. HEART DISEASES IN FORENSIC MEDICAL PRACTICE: SUDDEN CARDIAC DEATH //World Bulletin of Public Health. – 2022. – Т. 8. – С. 76-79.
9. Саноев Б. А. Морфологические И Морфометрические Характеристики Плаценты При Нормальной Беременности.« //DEVELOPMENT OF A MODERN EDUCATION SYSTEM AND CREATIVE IDEAS FOR IT, REPUBLICAN SCIENTIFIC-PRACTICAL ONLINE CONFERENCE ON"" SUGGESTIONS AND SOLUTIONS. – Т. 6. – С. 94-96.
10. Olimova A. Z1, Sanoyev BA 2, Jumayev AU 3 //CONGENITAL MALFORMATIONS: RELEVANCE AND EPIDEMIOLOGY IN THE BUKHARA REGION. EURASIAN JOURNAL OF MEDICAL AND NATURAL SCIENCES. – 2021. – Т. 1. – №. 2. – С. 158.
11. Турдиев М. Р., Махмудова Г. Ф. Морфофункциональные изменения, происходящие в селезенке в результате действия внешних и внутренних факторов //Тиббиётда янги кун. – 2022. – №. 11. – С. 49.
12. Turdiyev M. R., Sokhibova Z. R. Morphometric characteristics of the Spleen of white rats in normal and in chronic Radiation Disease //The american journal of medical sciences and pharmaceutical research. – 2021. – Т. 3. – №. 02. – С. 146-154.
13. Turdiyev M. R., Teshayev S. J. Comparative characteristics of the spleen of white rats in normal and chronic radiation sickness //Chief Editor. – Т. 7. – №. 11.

14. Turdiyev M. R. Teshayev Sh //J. Morphometric Assessment of Functional Immunomorphology of White Rat Spleen in the Age Aspect American Journal of Medicine and Medical Sciences. – 2019. – Т. 9. – №. 12. – С. 523-526.
15. Турдиев М. Р. и др. ЧАСТОТА РАСПРОСТРАНЕНИЯ РАКА МОЛОЧНОЙ ЖЕЛЕЗЫ В БУХАРСКОЙ ОБЛАСТИ //Молодежный инновационный вестник. – 2015. – Т. 4. – №. 1. – С. 267-268.
16. Олимова А. З., Шодиев У. М. Репродуктив Ёшдаги эркакларда бепуштлик сабаблари: Бухоро тумани эпидемиологияси //Scientific progress. – 2021. – Т. 2. – №. 7. – С. 499-502.
17. Zokirovna O. A., Abdurasulovich S. B. Ovarian Diseases in Age of Reproductive Women: Dermoid Cyst //IJTIMOIY FANLARDA INNOVASIYA ONLAYN ILMIY JURNALI. – 2021. – Т. 1. – №. 6. – С. 154-161.
18. Olimova A. Z. ECHINOCOCCOSIS OF LIVER OF THREE MONTHLY WHITE RAT //Scientific progress. – 2022. – Т. 3. – №. 3. – С. 462-466.
19. Олимова А. З. Морфологические и морфометрические особенности печени белых беспородных трех месячных крыс после тяжелой черепно-мозговой травмы вызванной экспериментальным путём //BARQARORLIK VA YETAKSHI TADQIQOTLAR ONLAYN ILMIY JURNALI. – 2021. – Т. 1. – №. 6. – С. 557-563.
20. Oglu M. Z. M., Zokirovna O. A. МОРФОЛОГИЧЕСКИЕ И МОРФОМЕТРИЧЕСКИЕ ПАРАМЕТРЫ ПЕЧЕНИ БЕЛЫХ БЕСПОРОДНЫХ КРЫС, ПЕРЕНЕСШИХ ЭКСПЕРИМЕНТАЛЬНУЮ ЧЕРЕПНО-МОЗГОВУЮ ТРАВМУ ПОСЛЕ МЕДИКАМЕНТОЗНОЙ КОРРЕКЦИИ //JOURNAL OF BIOMEDICINE AND PRACTICE. – 2023. – Т. 8. – №. 1.
21. Олимова А. З., Турдиев М. Р. БУХОРО ШАҲРИДА МЕЪДА ВА ЎН ИККИ БАРМОҚЛИ ИЧАК ЯРАСИ УЧРАШ ЭПИДЕМИОЛОГИЯСИ //Oriental renaissance: Innovative, educational, natural and social sciences. – 2022. – Т. 2. – №. 4. – С. 642-647.
22. Zokirovna O. A. Modern Concepts of Idiopathic Pulmonary Fibrosis //American Journal of Pediatric Medicine and Health Sciences. – 2023. – Т. 1. – №. 3. – С. 97-101.
23. Zokirovna O. A. Pathology of Precancerous Conditions of the Ovaries //American Journal of Pediatric Medicine and Health Sciences. – 2023. – Т. 1. – №. 3. – С. 93-96.
24. Зокировна, Олимова Азиза и Тешаев Шухрат Джумаевич. «Морфологические аспекты печени белых беспородных крыс после тяжелой черепно-мозговой травмы, вызванной экспериментально в виде дорожно-транспортного происшествия». Scholastic: Journal of Natural and Medical Education 2.2 (2023): 59-62.
25. Zokirovna O. A. Comparative characteristics of the morphological parameters of the liver at different periods of traumatic brain injury //Euro-Asia Conferences. – 2021. – С. 139-142.
26. Zokirovna O. A. Macroand microscopic structure of the liver of threemonthly white rats //Academic research in educational sciences. – 2021. – Т. 2. – №. 9. – С. 309-312.
27. Khikmatova N. I., Sanoev B. A. Репродуктив Ёшдаги Аёлларда Учрайдиган Патологияларнинг Статистик Таҳлили //AMALIY VA TIBBIYOT FANLARI ILMIY JURNALI. – 2023. – Т. 2. – №. 5. – С. 108-112.
28. I., H.N., & A., S.V.. (2023). Морфологическая И Иммуногистохимическая Характеристика Узловой Мастопатии. Research Journal of Trauma and Disability Studies, 2(5), 91–100. Retrieved from <http://journals.academiczone.net/index.php/rjtds/article/view/810>
29. Shodiev O. M., Sanoev B. A., Shodiev U. M. СУД ТИББИЙ АУТОПСИЯ АМАЛИЁТИДА БУЙРАК КИСТАЛАРИНИНГ УЧРАШИ //ЎЗБЕКИСТОН РЕСПУБЛИКАСИ СОҒЛИҚНИ САҚЛАШ ВАЗИРЛИГИ ТОШКЕНТ ТИББИЁТ АКАДЕМИЯСИ. – С. 170.

- 30. SADIEV E. S., SANOEYEV B. A. NEW DAY IN MEDICINE //NEW DAY IN MEDICINE**  
Учредители: Бухарский государственный медицинский институт, ООО" Новый день в  
медицине". – №. 2. – С. 26-30.