

## ETIOLOGY AND DIAGNOSTIC CRITERIA OF CERVICAL EROSION.

Asian International University

**Jumaeva D.R.**

**Temirova D.O**

Every year, about 300 thousand women die from cervical cancer. The pathology of cervical erosion occurs, on average, in 20 out of 100 women and is asymptomatic. The mucous membrane of the vagina of a healthy woman produces a secretion that protects the uterus during sexual intercourse, eliminates infection, and facilitates the penetration of sperm for future conception into the cervical canal and cavity. Changes in the biocenosis of the vagina, infections lead to changes in the mucous membrane of the cervix.

There are cases when the mucous membrane of the cervix changes, completely partially capturing the surface. In these cases, the doctor sees:

- thinned mucous membrane, small cracks, ulcers from which blood is released;
- red areas on the mucous membrane – can be of different shapes and sizes;
- a red ring of tissue that seems to creep onto the cervix.

In this case, it is worth specifying the definition of the term “erosion”, because all three signs, although they indicate a disease, are completely different in nature.

Wounds and cracks on the cervix are true erosion, lasting one to two weeks and then healing.

Cervical lesions can become overgrown with both regular and atypical epithelium. This condition is diagnosed most often and is called ectopia - it can be congenital and not be a pathology, and can pass without treatment by the age of 23-25.

The mechanism of mucosal thinning/epithelial replacement is unknown, but one of the popular versions is hormonal imbalances due to decreased immunity.

### **Reasons that provoke the appearance of erosion:**

- hormonal disorders (early onset of sexual activity, late pregnancy, menopause);
- papilloma viruses, sexually transmitted infections, HIV;
- disturbed vaginal flora (one of the possible causes is unprotected sexual intercourse);
- development of chronic inflammatory processes (abdominal cavity, internal genital organs);
- viral diseases suffered previously;
- long-term use of hormonal contraceptives;
- previously suffered injuries during the insertion of an IUD/abortion/surgeries in the uterine cavity;
- eversion/rupture of the cervix during childbirth;
- excess weight coupled with an inactive lifestyle;

- psychosomatics;
- permanent state of stress;
- diabetes mellitus, adrenal/thyroid dysfunction.

Usually, cervical erosion in women occurs without pronounced symptoms. It is discovered accidentally during a routine gynecological examination. Less often, the patient encounters non-specific symptoms:

- a small amount of bloody discharge after sexual intercourse;
- unpleasant sensations during intimate contact;
- discomfort or slight burning in the genital area;
- increase in the volume of daily mucous discharge from the vagina;
- discomfort or aching pain in the lower abdomen.

If cervical erosion occurs due to an infection or hormonal imbalance, the signs of the underlying disease come to the fore.

### **Classification of cervical erosion**

There are several types of classification of cervical erosion. Depending on the structure, the following forms are distinguished:

- true erosion: direct tissue defect;
- pseudo-erosion (ectopia): in turn, it can be follicular, papillary or mixed, depending on its structure.

The methods for diagnosing cervical diseases are: examination of the cervix in mirrors, visual assessment of the cervix after treatment with acetic acid (VIA), cytological examination, HPV testing, colposcopy, and cervical biopsy. Pathological examination of biopsy material is used to verify the diagnosis.

It is recommended that all patients undergo an analysis of anamnestic data in order to identify risk factors for the development of CIN. The level of evidence for the recommendation is C (the level of reliability of the evidence is 5). The risk factors for the development of CIN are early onset of sexual activity, a large number and frequent change of sexual partners, smoking, concomitant sexually transmitted infections, a large number of pregnancies and births, the presence of immunocompromising diseases (hepatitis B, C, HIV), immunosuppressive therapy, long-term use of combined oral contraceptives (COCs - according to the Anatomical Therapeutic Chemical Classification (ATC) - Progestogens and Estrogens (Fixed Combinations)). It is necessary to clarify the age of sexual debut, the number of sexual partners [6].

In case of “contact” bloody discharge from the genital tract, clarify its duration, the presence of a history of surgical interventions on the cervix, HPV infection, and evaluate the results of previously performed cervical screening [10].

CIN I/II/III, including preinvasive cervical cancer (CIS), do not have pathognomonic clinical manifestations and are diagnosed only by morphological methods [7].

**Physical examination** It is recommended that all patients undergo a speculum examination of the vagina and cervix to detect cervical pathology [12].

Ectropion appears as the presence of cylindrical epithelium on the exocervix, sometimes in combination with deformation of the external os. True erosion of the cervix is characterized by the presence of a bright red defect with clear irregular edges on the unchanged exocervix, represented by "torn" stratified squamous epithelium, often with edema, vascular dilation, fibrinous plaque and contact bleeding [12].

**Laboratory diagnostic tests** It is recommended that all women aged 21 to 65 years undergo cytological examination of a cervical microslide at 3-year intervals to detect CIN [2].

Cytological examination (traditional and liquid cytology) are the main methods of diagnosing the condition of the cervix. It is necessary to take into account the low reproducibility of the results of repeated smears taken within 1.5 months after the initial ones. Revision of abnormal smears is recommended. About 10% of traditional cytological smears are inadequate, which is associated with improper technique of material collection and preparation of the preparation [3].

Liquid-based cytology is more effective for detecting CIN, primarily due to the many-fold reduction in the number of inadequate smears [5].

It is recommended to perform a molecular biological study of cervical canal discharge for human papillomavirus (Papilloma virus) for the entire group of human papillomavirus (at least 12 types) for all women aged 30 to 65 years in order to identify the risk group for precancer [3] [16].

The level of evidence for recommendations is C (the level of reliability of evidence is 5). It is recommended to perform a molecular biological study of cervical canal discharge for human papillomavirus (Papilloma virus) in order to identify the risk of cervical cancer as a screening method in all women over 30 years of age every 5 years (in HPV-negative women) and annually in HPV-positive women [16].

The level of evidence for the recommendation is C (the level of certainty of the evidence is 5). It is advisable to carry out HPV testing for all women as a screening method from the age of 30 in combination with a cytological examination of a cervical sample (co-test) [16].

It is recommended to perform a molecular biological study of cervical canal discharge for human papillomavirus (Papilloma virus) in patients with a cytological conclusion of ASCUS, ASC-H, LSIL, HSIL, regardless of age [11].

The level of evidence for recommendations is C (the level of reliability of evidence is 5). It is advisable to conduct genotyping (partial or complete) and determine the viral load to assess the risk of CIN progression to invasion, as well as to select treatment tactics and monitor the effectiveness of treatment.



**Conclusions** . Cervical erosion is one of the pressing problems. The most convenient and effective way to prevent the disease is to undergo preventive medical examinations by women of reproductive age. For this purpose, women's clinics conduct examinations of the cervix of women using a modern colposcope application. In addition, cytological studies have been introduced in inpatient settings, so it is imperative that each patient diagnosed with cervical erosion undergo this examination. Only then will it be possible to cure this disease and prevent dangerous diseases.

### Literature

1. Temirova, D. O. (2024). Diagnosis of Cervical Erosion. *American Journal of Bioscience and Clinical Integrity*, 1(11), 84-89.
2. Темирова, Д. А. (2024). СОВРЕМЕННЫЕ МЕТОДЫ ЛЕЧЕНИЯ СИНДРОМА АШЕРМАНА. *Modern education and development*, 16(10), 132-142.
3. Темирова, Д. О. (2024). КЛИНИЧЕСКОЕ ЗНАЧЕНИЕ МИОМЫ МАТКИ В ГИНЕКОЛОГИИ. *Modern education and development*, 16(10), 116-131.
4. Olimjonovna, T. D. (2024). THE SYNDROME OF UNFORTUNATE CONSEQUENCES HELPPA. *Modern education and development*, 16(10), 156-166.
5. Olimjonovna, T. D. (2024). UTERINE PROLAPSE IS A DELICATE PROBLEM FOR WOMEN. *Modern education and development*, 16(10), 167-176.
6. Olimjonovna, T. D. (2024). BACTERIAL VAGINOSIS IS A DANGEROUS DISEASE. *Modern education and development*, 16(10), 143-155.
7. Temirova, D. (2024). ADENOMYOSIS AND DISORDERS OF REPRODUCTIVE FUNCTION. *European Journal of Modern Medicine and Practice*, 4(10), 195-199.
8. Saloxiddinovna, X. Y. (2024). Modern Views on the Effects of the Use of Cholecalciferol on the General Condition of the Bod. *JOURNAL OF HEALTHCARE AND LIFE-SCIENCE RESEARCH*, 3(5), 79-85.
9. Темирова, Д. О., & Мухитдинова, Х. С. (2025). РАЗРЫВ МАТКИ– СЕРЬЕЗНОЕ ОСЛОЖНЕНИЕ В АКУШЕРСТВЕ. *Modern education and development*, 19(2), 365-374.
10. Мухитдинова, Х. С., & Темирова, Д. О. (2025). КЛИНИЧЕСКОЕ ФАКТОРЫ СТРОЕНИЕ СПЕРМАТОЗОИДОВ ПРИ МУЖСКОГО БЕСПЛОДИЯ. *Modern education and development*, 19(2), 416-426.
11. Мухитдинова, Х. С., & Темирова, Д. О. (2025). ОСОБЕННОСТИ ПАТОЛОГИЯ ЯИЧНИКОВ В СТРУКТУРЕ ГИНЕКОЛОГИЧЕСКОЙ ЗАБОЛЕВАЕМОСТИ. *Modern education and development*, 19(2), 450-463.
12. Темирова, Д. О., & Мухитдинова, Х. С. (2025). ВНЕМАТОЧНАЯ БЕРЕМЕННОСТЬ–ЗАБОЛЕВАНИЕ, ТРЕБУЮЩЕЕ НЕОТЛОЖНОЙ ПОМОЩИ. *Modern education and development*, 19(2), 342-354.

13. Темирова, Д. О., & Мухитдинова, Х. С. (2025). МОРФОФУНКЦИОНАЛЬНЫЕ ОСОБЕННОСТИ ТРИХОМОНИАЗА. *Modern education and development*, 19(2), 355-364.
14. Темирова, Д. О., & Мухитдинова, Х. С. (2025). ПРЕЖДЕВРЕМЕННАЯ ОТСЛОЙКА ПЛАЦЕНТЫ. *Modern education and development*, 19(2), 316-327.
15. Темирова, Д. О., & Мухитдинова, Х. С. (2025). СПКЯ-ОДНА ИЗ ПРИЧИН БЕСПЛОДИЯ. *Modern education and development*, 19(2), 328-341.
16. Халимова, Ю. С., & Хафизова, М. Н. (2024). МОРФО-ФУНКЦИОНАЛЬНЫЕ И КЛИНИЧЕСКИЕ АСПЕКТЫ СТРОЕНИЯ И РАЗВИТИЯ ЯИЧНИКОВ (ОБЗОР ЛИТЕРАТУРЫ). *TADQIQOTLAR. UZ*, 40(5), 188-198.
17. Халимова, Ю. С. (2024). Морфологические Особенности Поражения Печени У Пациентов С Синдромом Мэллори-Вейса. *Journal of Science in Medicine and Life*, 2(6), 166-172.
18. Xalimova, Y. S. (2024). Morphology of the Testes in the Detection of Infertility. *Journal of Science in Medicine and Life*, 2(6), 83-88.
19. KHALIMOVA, Y. S. (2024). MORPHOFUNCTIONAL CHARACTERISTICS OF TESTICULAR AND OVARIAN TISSUES OF ANIMALS IN THE AGE ASPECT. *Valeology: International Journal of Medical Anthropology and Bioethics*, 2(9), 100-105.
20. Salokhiddinovna, K. Y. (2024). IMMUNOLOGICAL CRITERIA OF REPRODUCTION AND VIABILITY OF FEMALE RAT OFFSPRING UNDER THE INFLUENCE OF ETHANOL. *EUROPEAN JOURNAL OF MODERN MEDICINE AND PRACTICE*, 4(10), 200-205.
21. Salokhiddinovna, K. Y., Saifiloevich, S. B., Barnoevich, K. I., & Hikmatov, A. S. (2024). THE INCIDENCE OF AIDS, THE DEFINITION AND CAUSES OF THE DISEASE. *ОБРАЗОВАНИЕ НАУКА И ИННОВАЦИОННЫЕ ИДЕИ В МИРЕ*, 55(2), 195-205.
22. Nematilloevna, K. M., & Salokhiddinovna, K. Y. (2024). IMPORTANT FEATURES IN THE FORMATION OF DEGREE OF COMPARISON OF ADJECTIVES IN LATIN. *ОБРАЗОВАНИЕ НАУКА И ИННОВАЦИОННЫЕ ИДЕИ В МИРЕ*, 55(2), 150-157.
23. Saloxiddinovna, X. Y., & Ne'matillaevna, X. M. (2024). FEATURES OF THE STRUCTURE OF THE REPRODUCTIVE ORGANS OF THE FEMALE BODY. *ОБРАЗОВАНИЕ НАУКА И ИННОВАЦИОННЫЕ ИДЕИ В МИРЕ*, 55(2), 179-183.
24. Хафизова, М. Н., & Халимова, Ю. С. (2024). ИСПОЛЬЗОВАНИЕ ЧАСТОТНЫХ ОТРЕЗКОВ В НАИМЕНОВАНИЯХ ЛЕКАРСТВЕННЫХ ПРЕПАРАТОВ В ФАРМАЦЕВТИКЕ. *ОБРАЗОВАНИЕ НАУКА И ИННОВАЦИОННЫЕ ИДЕИ В МИРЕ*, 55(2), 172-178.



25. Хафизова, М. Н., & Халимова, Ю. С. (2024). МОТИВАЦИОННЫЕ МЕТОДЫ ПРИ ОБУЧЕНИИ ЛАТЫНИ И МЕДИЦИНСКОЙ ТЕРМИНОЛОГИИ. *ОБРАЗОВАНИЕ НАУКА И ИННОВАЦИОННЫЕ ИДЕИ В МИРЕ*, 55(2), 165-171.
26. Халимова, Ю. С., & Хафизова, М. Н. (2024). ОСОБЕННОСТИ СОЗРЕВАНИЕ И ФУНКЦИОНИРОВАНИЕ ЯИЧНИКОВ. *ОБРАЗОВАНИЕ НАУКА И ИННОВАЦИОННЫЕ ИДЕИ В МИРЕ*, 55(2), 188-194.
27. Халимова, Ю. С., & Хафизова, М. Н. (2024). КЛИНИЧЕСКИЕ АСПЕКТЫ ЛИЦ ЗЛОУПОТРЕБЛЯЮЩЕЕСЯ ЭНЕРГЕТИЧЕСКИМИ НАПИТКАМИ. *TADQIQOTLAR. UZ*, 40(5), 199-207.
28. Халимова, Ю. С., & Хафизова, М. Н. (2024). кафедра Клинических наук Азиатский международный университет Бухара, Узбекистан. *Modern education and development*, 10(1), 60-75.
29. Халимова, Ю. С., & Хафизова, М. Н. (2024). КЛИНИЧЕСКИЕ ОСОБЕННОСТИ ЗАБОЛЕВАНИЙ ВНУТРЕННИХ ОРГАНОВ У ЛИЦ, СТРАДАЮЩИХ АЛКОГОЛЬНОЙ ЗАВИСИМОСТЬЮ. *TADQIQOTLAR. UZ*, 40(5), 240-250.
30. Халимова, Ю. С., & Хафизова, М. Н. (2024). МОРФО-ФУНКЦИОНАЛЬНЫЕ И КЛИНИЧЕСКИЕ АСПЕКТЫ ФОРМИРОВАНИЯ КОЖНЫХ ПОКРОВОВ. *Modern education and development*, 10(1), 76-90.
31. Khalimova, Y. S. (2024). Features of Sperm Development: Spermatogenesis and Fertilization. *American Journal of Bioscience and Clinical Integrity*, 1(11), 90-98.
32. Salokhiddinova, K. Y., & Nematilloeva, K. M. (2024). MODERN MORPHOLOGY OF HEMATOPOIETIC ORGANS. *Modern education and development*, 16(9), 50-60.
33. Khalimova, Y. (2025). MORPHOLOGY OF PATHOLOGICAL FORMS OF PLATELETS. *Modern Science and Research*, 4(2), 749-759.
34. Jumaeva, D. R. (2025). VAGINAL MIKROBIOTSENOS, BAKTERIAL VAGINOZ HOLATI VA UNI DAVOLASH USULLARI. *Modern education and development*, 19(3), 65-77.
35. Djumaeva, D. R. (2025). TOMOSINTEZ BILAN RAQAMLI MAMMOGRAFIYA NAZORATI OSTIDA KO'KRAK BEZINING STEREOTAKSIK BIOPSIYASI. *Modern education and development*, 19(3), 53-64.
36. Жумаева, Д. Р. (2025). ОПТИМИЗАЦИЯ МЕТОДОВ ДИАГНОСТИКИ РАЗЛИЧНЫХ ФОРМ ЭНДОМЕТРИОЗА У ЖЕНЩИН РЕПРОДУКТИВНОГО ВОЗРАСТА. *Modern education and development*, 19(3), 78-87.

37. Жумаева, Д. Р. (2025). СОСТОЯНИЕ МИКРОБИОЦЕНОЗА ВЛАГАЛИЩА, БАКТЕРИАЛЬНЫЙ ВАГИНОЗ И ВОЗМОЖНОСТИ ЕГО ЛЕЧЕНИЯ. *Modern education and development*, 19(3), 88-101.
38. Жумаева, Д. Р. (2025). АНАЛИЗ ГИНЕКОЛОГИЧЕСКОЙ ПАТОЛОГИИ У ЖЕНЩИН ПОЗДНЕГО РЕПРОДУКТИВНОГО ПЕРИОДА ЗАБОЛЕВАНИЯМИ МОЛОЧНОЙ ЖЕЛЕЗЫ. *Modern education and development*, 19(3), 102-112.
39. DR Zhumaeva, D. R. (2024). The State of the Vaginal Microbiocenosis, Bacterial Vaginosis and its Treatment Options. *American Journal of Bioscience and Clinical Integrity*, 1(11), 78-83.
40. Хикматова, Н. И., & Жумаева, Д. Р. (2023). Инвазивные И Неинвазивные Методы Диагностики Заболевания Молочных Желез. *Central Asian Journal of Medical and Natural Science*, 4(6), 652-658.
41. ZHUMAeva, D. (2024). OPTIMIZATION OF METHODS OF DIAGNOSTICS OF VARIOUS FORMS OF ENDOMETRIOSIS IN WOMEN OF REPRODUCTIVE AGE. *Valeology: International Journal of Medical Anthropology and Bioethics (2995-4924)*, 2(9), 120-125.
42. Абдукаримов, У. Г., Ихтиярова, Г. А., & Джумаева, Д. Р. (2024). Скрининг Рака Молочной Железы: Настоящее И Будущее. Обзор Литературы. *Research Journal of Trauma and Disability Studies*, 3(2), 144-148.
43. Zhumaeva, D. R. (2025). IMMUNOLOGICAL CHARACTERISTICS OF THE ENDOMETRIUM IN WOMEN WITH IMPAIRED FERTILITY. *Modern education and development*, 19(2), 390-402.
44. Jumaeva, D. R. (2025). REPRODUKTIV BUZISHLI AYOLLARDA ENDOMETRIYNING IMMUNOLOGIK XUSUSIYATLARI. *Modern education and development*, 19(2), 403-415.
45. Jumaeva, D. R. (2025). REPRODUKTIV BUZISHLI AYOLLARDA ENDOMETRIYNING IMMUNOLOGIK XUSUSIYATLARI. *Modern education and development*, 19(2), 403-415.
46. Jumaeva, D. R. (2025). REPRODUKTIV BUZISHLI AYOLLARDA SURUNKALI AUTOIMMUN ENDOMETRITNING Kechishi. *Modern education and development*, 19(2), 375-389.
47. Zikrillayev, F. A. (2024). Cardiorehabilitations from Physiotherapeutic Treatments in Cardiovascular Diseases. *American Journal of Bioscience and Clinical Integrity*, 1(10), 96-102.
48. Зикрилляев, Ф. А. (2024). ОПРЕДЕЛЕНИЕ РАННИХ ФАКТОРОВ РИСКА ХРОНИЧЕСКОЙ БОЛЕЗНИ ПОЧЕК В ПУБЕРТНОМ ВОЗРАСТЕ. *Modern education and development*, 16(7), 166-180.



- 49.Зикриллаев, Ф. А. (2024). РОЛЬ ПРЕПАРАТОВ ЛЕРКАНИДИПИНА И АМЛОДИПИНА В ЛЕЧЕНИИ АРТЕРИАЛЬНОЙ ГИПЕРТЕНЗИИ ПРИ ХРОНИЧЕСКОЙ БОЛЕЗНИ ПОЧЕК. *Modern education and development*, 16(7), 213-229.
- 50.Abdurashitovich, Z. F. (2024). DETERMINATION OF THE ETIOPATHOGENESIS AND RISK FACTORS OF OBESITY AMONG ADOLESCENTS. *Modern education and development*, 16(7), 181-194.
- 51.Abdurashitovich, Z. F. (2024). EARLY RISK FACTORS FOR ARTERIAL HYPERTENSION AND FEATURES OF ITS ASSOCIATION WITH OTHER DISEASES. *Modern education and development*, 16(7), 195-212.
- 52.Abdurashitovich Z. F. ODAM ANATOMIYASI FANIDAN KALLA SUYAKLARI TUZILISHI VA SHAKLLANISHI HAQIDA //Modern education and development. – 2024. – Т. 16. – №. 7. – С. 149-165.
- 53.Халимова, Ю. С. (2024). КЛИНИКО-МОРФОЛОГИЧЕСКИЕ ОСОБЕННОСТИ ВИТАМИНА D В ФОРМИРОВАНИЕ ПРОТИВОИНФЕКЦИОННОГО ИММУНИТА. *ОБРАЗОВАНИЕ НАУКА И ИННОВАЦИОННЫЕ ИДЕИ В МИРЕ*, 36(3), 86-94.
54. Saloxiddinovna, X. Y. (2024). CLINICAL FEATURES OF VITAMIN D EFFECTS ON BONE METABOLISM. *ОБРАЗОВАНИЕ НАУКА И ИННОВАЦИОННЫЕ ИДЕИ В МИРЕ*, 36(5), 90-99.
55. Saloxiddinovna, X. Y. (2024). CLINICAL AND MORPHOLOGICAL ASPECTS OF AUTOIMMUNE THYROIDITIS. *ОБРАЗОВАНИЕ НАУКА И ИННОВАЦИОННЫЕ ИДЕИ В МИРЕ*, 36(5), 100-108.
56. Saloxiddinovna, X. Y. (2024). MORPHOFUNCTIONAL FEATURES BLOOD MORPHOLOGY IN AGE-RELATED CHANGES. *Лучшие интеллектуальные исследования*, 14(4), 146-158.
57. Saloxiddinovna, X. Y. (2024). CLINICAL MORPHOLOGICAL CRITERIA OF LEUKOCYTES. *Лучшие интеллектуальные исследования*, 14(4), 159-167.
58. Saloxiddinovna, X. Y. (2024). Current Views of Vitamin D Metabolism in the Body. *Best Journal of Innovation in Science, Research and Development*, 3(3), 235-243.
59. Saloxiddinovna, X. Y. (2024). MORPHOFUNCTIONAL FEATURES OF THE STRUCTURE AND DEVELOPMENT OF THE OVARIES. *EUROPEAN JOURNAL OF MODERN MEDICINE AND PRACTICE*, 4(4), 220-227.
- 60.Toxirovna, E. G. (2024). QALQONSIMON BEZ KASALLIKLARIDAN HASHIMOTO TIREODIT KASALLIGINING MORFOFUNKSIONAL O'ZIGA XOSLIGI. *Modern education and development*, 16(7), 120-135.
- 61.Toxirovna, E. G. (2024). REVMATOID ARTRIT: BO'G'IMLAR YALLIG'LANISHINING SABABLARI, KLINIK BELGILARI, OQIBATLARI



VA ZAMONAVIY DAVOLASH YONDASHUVLARI. *Modern education and development*, 16(7), 136-148.

62.Эргашева, Г. Т. (2024). ОЦЕНКА КЛИНИЧЕСКОЙ ЭФФЕКТИВНОСТИ ОРЛИСТАТА У БОЛЬНЫХ ОЖИРЕНИЕМ И АРТЕРИАЛЬНОЙ ГИПЕРТЕНЗИЕЙ. *Modern education and development*, 16(7), 92-105.

63.Ergasheva, G. T. (2024). THE SPECIFICITY OF AUTOIMMUNE THYROIDITIS IN PREGNANCY. *European Journal of Modern Medicine and Practice*, 4(11), 448-453.

64.Эргашева, Г. Т. (2024). ИССЛЕДОВАНИЕ ФУНКЦИИ ЩИТОВИДНОЙ ЖЕЛЕЗЫ ПРИ ТИРЕОИДИТЕ ХАШИМОТО. *Modern education and development*, 16(7), 106-119.

65.Toxirovna, E. G. (2024). GIPOFIZ ADENOMASINI NAZORAT QILISHDA KONSERVATIV JARROHLIK VA RADIATSIYA TERAPIYASINING UZOQ MUDDATLI SAMARADORLIGI. *Modern education and development*, 16(7), 79-91.

66.ERGASHEVA, G. T. (2024). OBESITY AND OVARIAN INSUFFICIENCY. *Valeology: International Journal of Medical Anthropology and Bioethics*, 2(09), 106-111.

67.Ergasheva, G. T. (2024). Modern Methods in the Diagnosis of Autoimmune Thyroiditis. *American Journal of Bioscience and Clinical Integrity*, 1(10), 43-50.