PREECLAMPSIA IS A PATHOLOGY THAT LEADS TO COMPLICATIONS FOR THE MOTHER AND FETUS

Temirova Dilnoza Olimzhonovna
Жумаева Дилноза Рустамовна
Asian International University

Preeclampsia is a complication of the second half of the gestational process (develops no earlier than the 20th week of pregnancy).

This pathology is characterized by an increase in vascular pressure (systolic pressure above 140 mm Hg and/or diastolic pressure above 90 mm Hg), which is combined with the appearance of protein in the urine (proteinuria over 0.3 g in a daily portion of urine). In some pregnant women, preeclampsia may manifest itself as arterial hypertension and symptoms of functional failure of one of the vital organs(kidneys, heart, brain, placenta). As a rule, in this case the obstetric complication proceeds more aggressively. Today, preeclampsia in pregnant women is considered as a result of insufficient invasion of syncytiotrophoblastic villi into the spiral arteries of the uterus. Outside of pregnancy, these vessels have a powerful muscular membrane, which spasms to stop bleeding, in particular menstrual. However, after implantation of the fertilized egg, muscle cells should gradually be replaced by fibrinoid. Such morphofunctional restructuring will contribute to a smooth pregnancy. In pregnant women with preeclampsia, the spiral vessels of the uterus partially retain the muscular membrane. Therefore, in response to the influence of various unfavorable factors (stress, somatic diseases, etc.), they can spasm.

Key words: Preeclampsia, vascular damage, obesity, eclampsia, visual impairment

Local ischemia triggers a cascade of systemic reactions, which are accompanied by the appearance of clinical signs of preeclampsia:

• the formation of vasoconstrictors leads to an increase in blood pressure;

• damage to the vessels of the renal glomeruli leads to an increase in the size of the pores, through which, like through a sieve, protein molecules “slip away”;

Types

The concept of mild preeclampsia has been abolished from the classification. From a clinical point of view, in obstetrics it is customary to distinguish between moderate and severe preeclampsia. This gradation determines different approaches to treatment.

• Moderate preeclampsia is an increase in systolic pressure within the limit

140-160 mm Hg and/or diastolic within 90-110 mm Hg in combination with non-massive proteinuria, which does not exceed 5 g per day. With this course of the disease, prolongation of pregnancy to full-term is possible.

Severe preeclampsia is a rise in pressure above 160 and/or 110 mm Hg, respectively, while the loss of protein in the urine per day exceeds 5 grams. Dysfunction of one of the vital organs or the development of fetal retention syndrome, regardless of the level of proteinuria and the magnitude of the increase in pressure, also indicates a severe course of the disease.

This type of preeclampsia is an indication for urgent delivery, since only the end of the gestation process can interrupt the pathological reactions that have started in the body. Prolongation of pregnancy is fraught with the development of severe complications in both the mother and the fetus.

According to the time of development, preeclampsia is divided into 2 types:

• Early - symptoms appear before 34 weeks of gestation.

• Late – clinical and laboratory signs are detected after 34 weeks.

Symptoms of preeclampsia

The classic clinical triad of preeclampsia is:

• arterial hypertension – to verify this symptom, it is recommended to measure blood pressure at least 2 times in compliance with basic rules;

• proteinuria – daily loss of protein molecules in urine more than 0.3 grams

• swelling, but slight swelling of the feet and shins that appears in the evening and goes away in the morning is not considered a pathology.

Subjective symptoms of preeclampsia at the beginning of the development of the pathology are usually absent. Therefore, all pregnant women undergo screening blood pressure measurement at each visit to the antenatal clinic. At each visit to the obstetrician-gynecologist, the woman also takes a general urine test.

is an indication for additional examination and the "Daily proteinuria" analysis.

Signs that may indicate a severe course of preeclampsia may include the following symptoms:

• headache and visual impairment ("veil" before the eyes, fogginess, "flickering spots");

• nausea and vomiting;

pain in the epigastric region;

• pain in the right hypochondrium;

• decreased urine output (less than 0.5 l per day);

• swelling throughout the body, especially if it appears quickly;

• shortness of breath;

• drowsiness;

• difficulty breathing through the nose;

• dry cough.

Severe preeclampsia can at any time, especially if left untreated, develop into eclampsia – a series of convulsive contractions of the muscles of the entire body. The danger of eclampsia is that the spasm of the muscles of the larynx blocks the supply of oxygen. Against the background of developing hypoxia, any vital organ can suffer.

Causes of preeclampsia

The causes of this obstetric complication are still not precisely known. The following may act as predisposing factors:

• chronic kidney disease;
• arterial hypertension that existed before conception;
• other vascular diseases;
• heart pathologies;
• obesity;
• diabetes mellitus;
• age of the pregnant woman (risks are increased in girls under 18 and women over 35);
• family history of preeclampsia;
• carrying 2 or more fetuses;
• antiphospholipid syndrome;
• hereditary coagulopathies.

Treatment of preeclampsia

Depending on the form of the course, preeclampsia is treated at home or in the hospital. Conditions for monitoring preeclampsia without hospitalization:

• blood pressure is controlled and stably maintained within normal values (below 140/90 mm Hg);
• no significant proteinuria (protein in the urine should be less than <0.3 g/l);
• normal platelet counts and liver enzymes (ALT, AST) in the blood are maintained;
• no signs of fetal growth retardation;
• blood flow is not impaired according to the results of a Doppler study.

If a pregnant woman is diagnosed with moderate preeclampsia, scheduled visits to the doctor are indicated every week.

Treatment for moderate preeclampsia is aimed at correcting arterial pressure. First of all, a diet with limited spicy and salty foods is recommended: this helps reduce the load on the kidneys, reduce swelling and control arterial pressure. If the pressure rises above 140/90 mm Hg, drug therapy is prescribed. If a woman is normally prone to low blood pressure, treatment begins at readings above 130/85 mm Hg.

In chronic hypertension (increased blood pressure above 140/90 mm Hg, which was detected before pregnancy or during the first 20 weeks of pregnancy and persists throughout pregnancy), a combination of 2-3 drugs is usually prescribed. If

preeclampsia is severe, magnesium therapy (magnesium preparations, usually in the form of IV drips) is used to prevent or treat seizure

In chronic hypertension (increased blood pressure above 140/90 mm Hg, which was detected before pregnancy or during the first 20 weeks of pregnancy and persists throughout pregnancy), a combination of 2-3 drugs is usually prescribed. If preeclampsia is severe, magnesium therapy (magnesium preparations, usually in the form of IV drips) is used to prevent or treat seizures.

In case of impaired consciousness and other signs of deterioration of internal organs, artificial ventilation of the lungs may be indicated.

After the 24th week of pregnancy, the doctor may decide on premature delivery.

Indications for emergency delivery:

• bleeding from the birth canal;
• suspected premature detachment of a normally located placenta;
• acute hypoxia (oxygen starvation) of the fetus;
• headaches that do not subside with painkillers;
• visual impairment;
• pain in the upper abdomen that does not respond to pain relief;
• nausea and vomiting;
• progressive deterioration of liver or kidney function;
• convulsions (eclampsia);
• blood pressure above 160/110 mm Hg, not amenable to correction with medications;
• pathological changes in blood parameters;
• fetal abnormalities according to CTG data;
• deterioration or cessation of blood flow in the umbilical cord;
• fetal growth retardation;
• oligohydramnios.

Preeclampsia, including its severe form, is not considered an indication for cesarean section if the birth occurs after 32 weeks of pregnancy and is not complicated by other circumstances (for example, impaired blood flow in the umbilical cord). At the same time, during labor, the woman must receive anticonvulsant and antihypertensive therapy. After childbirth, the woman is observed in the intensive care unit for at least 24 hours.

Blood pressure is monitored for 7 days. If the pressure exceeds 140/90 mm Hg, antihypertensive therapy is maintained.

Complications of preeclampsia

Preeclampsia can provoke the development of chronic diseases (including atherosclerosis, diabetes mellitus and other pathologies) or cause disability in the mother or child.

One of the most dangerous complications is eclampsia.

In most cases, the consequences of the pathology are preventable. Regular monitoring of pregnant women and timely treatment can reduce the risk of dangerous complications.

• Most women with preeclampsia have their blood pressure normalized in the first 3-7 days after delivery.

• Preeclampsia is a serious complication that can develop after the 20th week of pregnancy, as well as during labor and the postpartum period.

The pathology is manifested by pressure above 140/90 mm Hg, as well as the appearance of protein in the urine.

• The condition is dangerous because sometimes, against the background of severe forms, eclampsia can begin - a series of convulsions, which is accompanied by loss of consciousness and the development of a coma, cerebral hemorrhage, pulmonary edema, premature placental abruption or other critical disorders.

• Because preeclampsia can occur without obvious symptoms, it is important to have regular diagnostic examinations and tests.

In conclusion, preeclampsia is a serious and complicated disease. Complications of preeclampsia include low birth weight, intracranial hypertension, HELLP syndrome in women, pathological processes in the kidneys, heart and eyes. There are even cases of death from severe complications during childbirth. Therefore, every woman must undergo preventive medical examinations.

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. Халимова, Ю. С., & Хафизова, М. Н. (2024). МОРФО-ФУНКЦИОНАЛЬНЫЕ И КЛИНИЧЕСКИЕ АСПЕКТЫ СТРОЕНИЯ И РАЗВИТИЯ ЯИЧНИКОВ (ОБЗОР ЛИТЕРАТУРЫ). *TADQIQOTLAR. UZ*, *40*(5), 188-198.
10. 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.
11. Xalimova, Y. S. (2024). Morphology of the Testes in the Detection of Infertility. *Journal of Science in Medicine and Life*, *2*(6), 83-88.
12. 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.
13. 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.
14. 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.
15. Темирова, Д. О., & Мухитдинова, Х. С. (2025). РАЗРЫВ МАТКИ–СЕРЬЕЗНОЕ ОСЛОЖНЕНИЕ В АКУШЕРСТВЕ. *Modern education and development*, *19*(2), 365-374.
16. Мухитдинова, Х. С., & Темирова, Д. О. (2025). КЛИНИЧЕСКОЕ ФАКТОРЫ СТРОЕНИЕ СПЕРМАТОЗОИДОВ ПРИ МУЖСКОГО БЕСПЛОДИЯ. *Modern education and development*, *19*(2), 416-426.
17. Мухитдинова, Х. С., & Темирова, Д. О. (2025). ОСОБЕННОСТИ ПАТОЛОГИЯ ЯИЧНИКОВ В СТРУКТУРЕ ГИНЕКОЛОГИЧЕСКОЙ ЗАБОЛЕВАЕМОСТИ. *Modern education and development*, *19*(2), 450-463.
18. Темирова, Д. О., & Мухитдинова, Х. С. (2025). ВНЕМАТОЧНАЯ БЕРЕМЕННОСТЬ–ЗАБОЛЕВАНИЕ, ТРЕБУЮЩЕЕ НЕОТЛОЖНОЙ ПОМОЩИ. *Modern education and development*, *19*(2), 342-354.
19. Темирова, Д. О., & Мухитдинова, Х. С. (2025). МОРФОФУНКЦИОНАЛЬНЫЕ ОСОБЕННОСТИ ТРИХОМОНИАЗА. *Modern education and development*, *19*(2), 355-364.
20. Темирова, Д. О., & Мухитдинова, Х. С. (2025). ПРЕЖДЕВРЕМЕННАЯ ОТСЛОЙКА ПЛАЦЕНТЫ. *Modern education and development*, *19*(2), 316-327.
21. Темирова, Д. О., & Мухитдинова, Х. С. (2025). СПКЯ-ОДНА ИЗ ПРИЧИН БЕСПЛОДИЯ. *Modern education and development*, *19*(2), 328-341.
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. Salokhiddinovna, K. Y., & Nematilloevna, 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 MIKROBIOTSENOZ, 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 andits 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 ENDOMETRITNNING KECHISHI. *Modern education and development*, *19*(2), 375-389.
47. Zikrillaev, F. A. (2024). Cardiorehabilitations from Physiotherapeutic Treatments in Cardiovascular Diseases. *American Journal of Bioscience and Clinical Integrity*, *1*(10), 96-102.
48. Зикриллаев, 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 OFAUTOIMMUNE 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.