AJPMHS GLOBAL RESEARCH NETWORK

AMERICAN Journal of Pediatric Medicine and Health Sciences
Volume 01, Issue 09, 2023 ISSN (E): 2993-2149

The Significance Of Anti-Esterogen And Progesterone Antibodies As A Risk Factor In Premature Rupture Of Amniotic Fluid

Guzal Mukhtarovna Kayumova
Department of Gynecology, Bukhara State Medical Obstetrics Institute No. 1 named after Abu Ali Ibn Sina

***Summary*:** Premature amniocentesis occurs in 3% of all pregnancies. 50% of preterm births are caused by premature outflow of amniotic fluid.

Most unexplained complications during pregnancy can be attributed to the mother's aggressive immune response to the fetus. According to the authors of our country, estrogen and progesterone are involved in both specialized and non-specialized reactions of the body. Due to the stable action of these hormones, antifetal immune responses are prevented and a sufficient level of antimicrobial resistance in the mother's body is ensured. In the studies of K.S. Krasilnikova, the relative risk of fetal pathology increases by 2-7 times at high levels of antibodies compared to estrogen and progesterone. Foreign authors have information about the role of antibodies to PG in the genesis of premenstrual syndrome, autoimmune dermatitis, and toxicosis of pregnant women. Antibodies to PG, primary reproductive losses were detected in almost half of the women, and, according to the author, this may be one of the factors leading to early termination of a normal pregnancy.

Key words: premature ejaculation, estrogens, progesterone, risk factors.

Premature amniocentesis occurs in 3% of all pregnancies. 50% of premature births are caused by premature rupture of the amniotic fluid. [1,2,3].Most unexplained complications in pregnancy can be attributed to the mother's aggressive immune response to the fetus. According to the authors of our country, estrogen and progesterone participate in both specialized and non-specialized reactions of the body. Due to the steady effect of these hormones, antifetal immune reactions are prevented and a sufficient level of antimicrobial resistance is ensured in the mother's body [4,5]. In the study of K.S. Krasilnikova, the relative risk of pathology in the fetus at high values of AT level compared to estrogen and progesterone is 2 - increases 7 times [7,8]. Foreign authors have information about the role of AT to PG in the genesis of premenstrual syndrome, autoimmune dermatitis, toxicosis of pregnant women [9]. Antibodies to PG, primary reproductive tract constipation was found in almost half of existing women, and according to the author, it may be considered one of the factors leading to early termination of normal pregnancy [6,10].

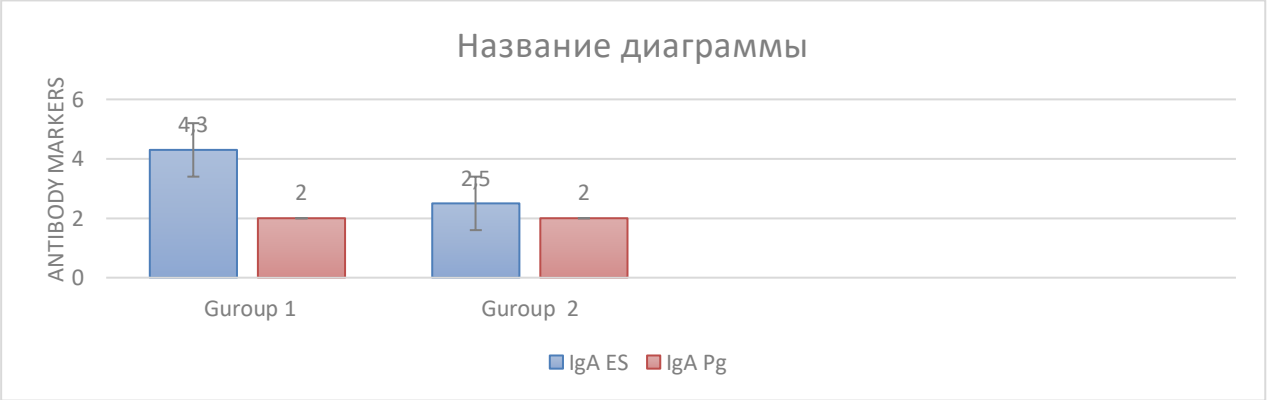
The purpose of the study is to study the importance of antibodies against estrogen and progesterone as a risk factor for the development of preterm labor.

Materials and methods. The research work was carried out at the perinatal center base of Bukhara region in 2022-2023. Retrospective, comparative, analytical studies were carried out in the research work. 149 patients were included in the study, group I - women with preterm labor at 22-36.6 weeks (n=68), group II - healthy women at 37-41 weeks (n=40) organized.Compared with women of group I,

statistically significant differences were found in the formation of AT to ES. ES>5 level of IgA AT in women with a period of 22-36.6 weeks is considered a risk factor of MOSC.Group I was made up of women with preeclampsia in the period of 22-36.6 weeks (n=68), group II was made up of women with physiological pregnancy in the period of 37-41 weeks (n=40). Criteria for inclusion in group I: 22-36.6 weeks of pregnancy in pregnant women; sudden pregnancy; voluntary consent to participate in research. Exclusion criteria of group I: long-term pregnancy (37 weeks and more), absence of early amniotomy in the period of 22-36.6 weeks of gestational age; pregnancy caused by assisted reproductive technology (IVF) / stimulation of ovulation; refusal to participate in the study. Criteria for inclusion in group II: pregnancy period at the time of blood sampling is 37-41 weeks; Exclusion criteria of group II: pregnancy period at the time of blood sampling is 22-36.6 weeks; pregnancy caused by assisted reproductive technologies (IVF) / ovulation induction; the presence of systemic autoimmune diseases.The average age of women in group I is 28.9 ± 5.6 years; In group II - 31.5 ± 5.4 (p=0.048). Weight at the time of blood sampling was 74.9 ± 17.7 kg and 78.2 ± 18.1 kg in the groups, respectively (p=0.202). Height in group I - 1.7 ± 0.1 cm; In group II - 1.6 ± 0.1 cm (p=0.235).The concentration of ES and PG was determined using the HUMAREADER HS German kit. Using IFA (enzyme immunoassay), AT IgA and IgG to ES and PG were determined. The research was conducted at the base of the laboratory of HARMONIYA DIAGNOSTIKA limited liability company.The results obtained Statistica v. Statistical processing was performed using the 6.0 software package. The character of data distribution was assessed using Shapiro-Wilk's W criterion. The Mann-Whitney test was used when the level of significance was $p<0.05$ to compare two independent groups on quantitative markers with non-normal distribution. To assess the difference in relative values, the x2 criterion was used when the significance level was $p<0.05$. If the expected number of events was less than 10 in at least one cell, the xi-squared (x2) criterion was calculated with Yates correction. ROC analysis was performed to determine the threshold values (cut off) of AT levels, and AUC values describing the prognostic significance of indicators were calculated.

Results and their discussion. The obtained data of class A and G Ig AT in relation to ES and PG, BP are clearly shown in Figures 1 and 2. ES level of IgA antibodies was statistically significantly higher in women of group I compared to women of group II (p=0.002). There was no reliable difference between IgA and PG in the studied groups (p=0.766). The number of IgG antibodies to ES was lower in women of group I than in women of group II, but statistically significant differences were not observed (p=0.511).

Figure 1 IgA medians in groups I and II



Using ROC analysis, extreme points - the boundary between norm and pathology was determined according to the determined values of AT and hormones in the examined groups. For each marker, the AUC value and the risk of developing CKD at specific levels of AT that do not reach or exceed these cut points were calculated (Table 1).

Table 1

Frequency of occurrence of low and high (>) levels of BP, ES and PG of AT in women of group I and II

AT	1 group N 68	2 group N 81	X^2 P	OR 95% CI	AUC
IgA ES ≤5 **ES ≥5**	26/38 42/61,8	55/67,9 26/32,1	11,9 0,001	0,3 (0,1.0,6) 3,4 (1,7 : 6,7)	0,69
IgA PG≤ 3 **PG ≥3**	35/51,4 33/48,5	39/48,1 42/51,9	0,06 0,811	0,9 (0,5: 1,7) 1,1 (0,6: 2,2)	0,52
IgA ES≤ 7 **ES ≥7**	24/35,3 44/64,7	33/40,7 48/59,3	0,26 0,609	0,8 (0,4: 1,5) 1,3 (0,6 : 2,5)	0,54
IgA PG≤ 5 **PG ≥5**	29/42,6 39/57,4	39/48,1 42/51,9	0,26 0,613	0,8 (0,4: 1,5) 1,3 (0,7 : 2,4)	0,52

The high level of IgA antibodies ES>5 was statistically significantly higher in group I (61.8%) compared to group II (32.1%) ($p<0.001$; AUC = 0.69). This means that this indicator is a good classifier, and the OR is 3.4.Having identified higher levels of IgA antibodies to ES, which were found to be more statistically significant in women with HCC, we compared the medians of statistically significant antibodies and their ratios at high threshold values (Table 2).

Table 2. Medians of antibodies with statistically significant upper limit indicators

Group	IgA ES ≤5	IgA ES ≥5
	Me IgA ES	**Me IgA ES**
1 Group	3,65	6,7
2 Group	3,57	7,8
P	0,731	0,541

At a high ratio of IgA, ES > 5, it can be seen that the median of IgA to ES was smaller in the experimental group (6.7 UE) than in the control group (7.8 UE), but no statistically significant difference was detected between the groups ($p=0.541$). . Also, at a low ratio of IgA, ES < 5 median IgA to ES in group I (3.65 UE) was not statistically different from group II (3.57 UE; $r = 0.731$).In this study, it was found that there is a high production of IgA AT in ES in women with preterm delivery. But there was no statistical difference in the presence of antibodies to PG in the groups.

Conclusion. Thus, as a result of the study, it was determined that the threshold values of antibodies to ES for premature amniocentesis in women with preterm labor were more than 5 UE of IgA, which is probably due to estrogens in the development of this complication of pregnancy. shows the importance of influence. The detection of antibodies to estrogens can expand the possibilities of predicting premature ejaculation.

Reference

1. Ikhtiyarova Gulchehra, Dustova Nigora, Qayumova Guzal.(2017).Diagnostic characteristics of pregnancy in women with antenatal fetal death. European Journal of Research. Social Science and Humanities. Vienna, Austria.IMPACT FACTOR SJIF 3, 5/ IFS 3, 8 № 4 (4),95-107.

2. G.M. Kayumova., X.N. Khamroev.,G.A. Ixtiyarova. (2021).Morphological features of placental changes in preterm labor.Тиббиётда янги кун, 3 (35/1). 104-107.
3. Qayumova G.M. Dustova N.Q.(2023)Muddatdan oldin qog'onoq parda yorilishi kuzatilgan homiladorda tug'ruq yo'llari mikrobiosenoz holatini baholashda femoflor testining ahamiyati. Научно-практическая конференция с международным участием. "Будущее акушерства гинекологии,репродуктологии и перинатальной медицины,посвященная памяти профессор Аюповой Ф.М." 56-57.
4. Guzal Mukhtarovna Kayumova,Nigora Qahramonovna Dustova,Yulduz Mukhtarovna Mukhtarova.(2023).Muddatdan oldin qog'onoq suvining ketishida klinik omillarning ta'sirini baholash Тиббиётда янги кун, 6(56).103-108.
5. Қаюмова Гўзал Мухтор қизи, Дўстова Нигора Қаҳрамоновна (2023).Муддатдан олдин қоғоноқ суви кетган ҳомиладорларда туғруқ йўллари микробиоценоз ҳолатини баҳолашда фемофлор тестининг аҳамияти. Биология ва тиббиёт муаммолари.№3 (144) 109-112.
6. G.M. Kayumova.,X.N Hamroyev.(2023).Significance of the femoflor test in assessing the state of vaginal microbiocenosis in preterm vaginal discharge. International Journal of Medical Sciences And Clinical Research (ISSN – 2771-2265) VOLUME 03 ISSUE 02 SJIF IMPACT FACTOR (2021: 5. 694) (2022: 5. 893) (2023: 6. 184) OCLC – 1121105677. PAGES: 58-63.
7. Г.М.Қаюмова.Н.Қ.Дўстова.(2023).Muddatdan oldin qog'onoq suvining ketishida xavf omillarning ta'sirini baholash.Журнал гуманитарных и естественных наук № 2 (07).11-18.
8. L.V. Sarkisova ,Kayumova G.M. (2019).Exodus of premature birth. Тиббиётда янги кун, 1(25)155-159.
9. Саркисова Л.В., Каюмова Г.М.(2018).Перинатальный риск и исход преждевременных родов Проблемы медицины и биологии 12-13 апреля 2018 года 169-175.
10. 10. Sarkisova Lyalya. Valeryevna, Kayumova Guzal Mukhtorovna, Egamova Sitora Kobylovna (2019). Premature Birth In A Modern Aspect. International Journal of Bio-Science and Bio-Technology (IJBSBT) ISSN: 2233-7849 Vol-11-Issue-9.10.23.Impact factor 6.31-37.
11. Г.М.Каюмова.,Л.В.Саркисова.,Н.Н.Умидова. (2018).Современные взгляды на проблему преждевременных родов. Тиббиётда янги кун 183-185.
12. Саркисова Л.В., Каюмова Г.М., Умидова Н.Н. (2018).Морфологические изменения фетоплацентарного комплекса при герпетической инфекции. Тиббиётда янги кун.188-191.
13. Г.М.Каюмова.,Хамроев Х.Н.,Ихтиярова Г.А.(2021).Причины риска развития преждевременных родов в период пандемии.139-148.
14. Саркисова Л.В., Каюмова Г.М.(2018).Перинатальный риск и исход преждевременных родов.Проблемы медицины и биологии.169-175.
15. G.M. Kayumova, N.K. Dustova (2023).Significance of the femoflor test in assessing the state of vaginal microbiocenosis in preterm vaginal discharge. Problems and scientific solutions. International conference: problems and scientific solutions. Abstracts of viii international scientific and practical conference vol 2, issue 2, australia, Melbourne 150-153.
16. Каюмова Г.М, Мухторова Ю.М, Хамроев Х.Н.(2022).Причина преждевременных родов.Scientific and innovative therapy.Научный журнал по научный и инновационный терапии.57-58.
17. Каюмова Г.М, Мухторова Ю.М, Хамроев Х.Н.(2022).Определить особенности течения беременности и родов при дородовом излитии околоплодных вод.Scientific and innovative therapy.Научный журнал по научный и инновационный терапии. 58-59.
18. Каюмова Г.М, Мухторова Ю.М.(2022).Пороговые значения антител к эстрадиолу, прогестерону и бензо[а]пирену как факторы риска преждевременного излития околоплодных

вод при недоношенной беременности.Scientific and innovative therapy.Научный журнал по научный и инновационный терапии. 59-60.
19. Каюмова Г.М, Мухторова Ю.М. (2022).Применение теста «фемофлор-16» для оценки состояния биоценоза генитального тракта у женщин с преждевременном излитии околоплодных вод.Scientific and innovative therapy.Научный журнал по научный и инновационный терапии. 60-61.
20. G.M. Kayumova, N.K. Dustova. (2023).Assessment of the state of the genital tract microbiocenosis in pregnant women with premature rupture of the membranes using the femoflor test. modern scientific research international scientific Journal 2023 Vol1 Issue1.70-72.
21. G.M. KAYUMOVA, N.K. DUSTOVA.(2023)Features of the hormonal background with premature surge of amniotic fluid. Of the international scientific and practical conference of young scientists «Science and youth: conference on the quality of medical care and health literacy»Ministry of healhcare of the republic of kazakhstan kazakhstan's medical university«KSPH».ISBN 978-601-305-519-0.29-30.
22. G.M. KAYUMOVA, N.K. DUSTOVA.(2023).Assessment of the state of the genital tract microbiocenosis in pregnant women with premature rupture of the membranes using the femoflor test. Of the international scientific and practical conference of young scientists «Science and youth: conference on the quality of medical care and health literacy».ministry of healhcare of the republic of kazakhstan kazakhstan's medical university «KSPH». ISBN 978-601-305-519-0 . 5-6.
23. 23. Каюмова Г.М., Хамроев Х.Н., Ихтиярова Г.А. (2021).Причины риска развития преждевременных родов в период пандемии организм и среда жизни к 207-летию со дня рождения Карла Францевича Рулье: сборник материалов IV -ой Международной научнопрактической конференции (Кемерово, 26 февраля 2021 г.).ISBN 978-5-8151-0158-6.139-148.
24. Qayumova G.M Xamroyev X.N Muxtorova Y. (2021).Changes of the placenta in preterm labor.Новые проблемы медицинской науки и перспективы их решений.XVI научно-практическая конференция молодых учёных и студентов с международным участием ГОУ "ТГМУ им.Абуали ибни Сино", посвященная 30-летию Государственной независимости Республики Таджикистан и годам развития села, туризма и народных ремесел.217.
25. U., N. A., & F., M. G. (2023). Morphofunctional Changes of the Spleen Under the Influence of Various Factors in Postnatal Ontogenesis. Web of Semantic: Universal Journal on Innovative Education, 2(5), 228–233.
26. F., M. G., & U., N. A. (2023). Age-Related Morphological and Morphometric Parameters of the Spleen in Postnatal Ontogenesis. Web of Semantic: Universal Journal on Innovative Education, 2(5), 234–242
27. Khamroyev X.N. Qayumova G.M. (2021).Improving the results of treatment of choledocholithiasis in liver diseases.Новые проблемы медицинской науки и перспективы их решений.XVI научно-практическая конференция молодых учёных и студентов с международным участием ГОУ "ТГМУ им.Абуали ибни Сино", посвященная 30-летию Государственной независимости Республики Таджикистан и годам развития села, туризма и народных ремесел.217.
28. 26. Каюмова Г.М., Ихтиярова Г.А.(2021).Причина перинатальных потер при преждевременных родов у женщин с анемией.(2021).Материалы республиканской научно-практической онлайн конференции.«Актуальные проблемы современной медицины в условиях эпидемии»76-7
29. Каюмова Г.М., Саркисова Л.В., Саъдуллаева Л.Э.(2018).Показатели центральной гемодинамики и маточно-фетоплацентарного кровотока при недонашивании

беременности.Республиканской научно практической конференции «Актуальные вопросы охраны здоровья матери и ребенка, достижения и перспективы».56-57.
30. Каюмова Г.М., Саркисова Л.В., Рахматуллаева М.М.(2018).Особенности состояния плаценты при преждевременных родах.Республиканской научно практической конференции «Актуальные вопросы охраны здоровья матери и ребенка, достижения и перспективы».57-59.
31. 29..КаюмоваГ.М.(2019).Особенности клинического течения преждевременных родов и перинатальные исходы. Первая Бухарская международная конференция студентов-медиков и молодежи.262-263.
32. 30.Хамроев Х.Н, Туксанова Н.Э. «Characteristic of morphometric parameters of internal organs in experimental chronic alcoholism». «Тиббиётда янги кун" 2 (34) 2021. https://newdaymedicine.com/index.php/2021/05/01/44-2-34-2021-khamroev-x-n-tukhsanova-n-e-characteristic-of-morphometric-parameters-of-internal-organs-in-experimental-chronic-alcoholism/
33. 31.Хамроев Х.Н , Хасанова Д.А. "Морфофункциональные изменения печени в динамике хронической алкогольной инокцикации». «Тиббиётда янги кун» 5 (37)2021. https://newdaymedicine.com/index.php/5-37-2021/
34. 32.Хамроев Х.Н. «Toxic liver damage in acute phase of ethanol intoxication and its experimental correction with chelate zinc compound» . European journal of modern medicine and practice vol.2no.2(2022)ejmmp issn:2795-921x. https://inovatus.es/index.php/ejmmp/article/view/286
35. 33.Khamroyev Kh.N. «**The morphofunctional changes in internal organs during alcohol intoxication».** European journal of modern medicine and practice vol. 2 no. 2 (2022) ejmmp issn: 2795-921x. https://inovatus.es/index.php/ejmmp/article/view/285
36. 34.Хамроев Х.Н , Хасанова Д.А . «Жигар морфометрик кўрсаткичларининг меъёрда ва экспериментал сурункали алкоголизмда қиёсий таснифи». Журнал гуманитарных и естественных наук № 2 (07), 2023. http://journals.tnmu.uz/index.php/gtfj/issue/view/7/10
37. 35.Хамроев Х.Н , Хасанова Д.А . «Жигар морфометрик кўрсаткичларининг меъёрда ва экспериментал сурункали алкоголизмда қиёсий таснифи». Медицинский журнал Узбекистана | Medical journal of Uzbekistan 2023 №2
38. 36..Hamroev Khudoyshukur Nutfilloevich, Khasanova Dilnoza Akhrorovna. «Comparative classification of liver morphometric parameters in the liver and in experimental chronic alcoholism». International Journal of Cognitive Neuroscience and Psychology IJCNP, Volume 1, Issue 1, 2023 https://medicaljournals.eu/index.php/IJCNP/article/view/18
39. 37.Хамроев Х.Н , Хасанова Д.А . «Сравнительная характеристика морфометрических показателей печени». Журнал Проблемы биологии и медицины ПБиМ 2023 №5. https://www.sammu.uz/ru/journals.
40. 38..Khamroyev Kh.N. «To assess liver morphological changes in the norm and features of the character of its changes during chronic alcohol intoxication». Международной научно-практической конференции молодых ученых «наука и молодежь: конференция по качеству медицинской помощи и медицинской грамотности» 25 апреля, 2023. https://ksph.edu.kz/ru/2023/04/%d0%bc%d0%b0%d1%82%d0%b5%d1%80%d0%b8%d0%b0%d0%bb%d1%8b%d0%ba%d0%be%d0%bd%d1%84%d0%b5%d1%80%d0%b5%d0%bd%d1%86%d0%b8%d0%b8/
41. 39.Хамроев Х.Н. «Провести оценку морфологических изменений печени в норме и особенностей характера ее изменений при хронической алкогольной интоксикации». Republican scientific and practical conference with international participation 30.05.2023. A p p l i c a t i o n o f h i g h i n n o v a t i v e t e c h n o l o g i e s i n p r e v e n t i v e m e d i c i n e. https://adti.uz/konferensiyalar/

42. 40.Хамроев Х.Н, Ганжиев Ф.Х. «Динамика структурно-функциональных нарушение печени крыс при экспериментальном алгоколние циррозе». Problems of modernsurgery 06.10.2023. https://adti.uz/konferensiyalar/
43. 41.Хамроев Х.Н , Хасанова Д.А, Ганжиев Ф.Х, Мусоев Т.Я. «Шошилинч тиббий ёрдам ташкил қилишнинг долзарб муаммолари: Политравма ва ўткир юрак-қон томир касалликларида ёрдам кўрсатиш масалалари» XVIII Республика илмий-амалий анжумани 12.10.2023 й.
44. 42.Хамроев Х.Н . «Влияние диффузных заболеваний печени на течени и прогноз механической желтухи» Сборник материалов первой Бухарской международной конференции “студентов-медиков и молодежи” том 2019г. 136-137 стр. https://repo.knmu.edu.ua/bitstream/123456789/24890/1/%D0%9D%D0%B5%D1%87%D0%B8%D0%BF%D0%BE%D1%80%D1%83%D0%BA_%D0%91%D1%83%D1%85%D0%B0%D1%80%D0%B0%20(pdf.io).pdf
45. Muxiddinovna, I. M. (2022). IMPACT OF ENERGY DRINKS AND THEIR COMBINATION WITH ALCOHOL TO THE RATS METOBOLISM. Gospodarka i Innowacje., 22, 544-549.
46. 44..Mukhiddinovna, I. M. (2022). EFFECTS OF CHRONIC CONSUMPTION OF ENERGY DRINKS ON LIVER AND KIDNEY OF EXPERIMENTAL RATS. International Journal of Philosophical Studies and Social Sciences, 2(4), 6-11.
47. Muxiddinovna, I. M. (2022). Effects of Energy Drinks on Biochemical and Sperm Parameters in Albino Rats. *CENTRAL ASIAN JOURNAL OF MEDICAL AND NATURAL SCIENCES*, *3*(3), 126-131
48. 46..Muxiddinovna, I. M. (2022). Demage of Energy Drinks on the Spermatogenesis of Male Rat’s. *Research Journal of Trauma and Disability Studies*, *1*(9), 111-118.
49. 47..Muxiddinovna, I. M. (2022). Effects of Energy Drinks on Biochemical and Sperm Parameters in Albino Rats. *CENTRAL ASIAN JOURNAL OF MEDICAL AND NATURAL SCIENCES*, *3*(3), 126-131.
50. 48..Muxiddinovna, I. M. (2022). Ameliorative Effect of Omega-3 on Energy Drinks-Induced Pancreatic Toxicity in Adult Male Albino Rats. *INTERNATIONAL JOURNAL OF HEALTH SYSTEMS AND MEDICAL SCIENCES*, *1*(5), 13-18.
51. 49..Muxiddinovna, I. M., & Sobirovna, A. Z. (2022). Pregnancy with Twins with Preeclampsia. *Central Asian Journal of Literature, Philosophy and Culture*, *3*(11), 212-221.
52. Muxiddinovna, I. M., & Sobirovna, A. Z. (2022). Anemia Iron Deficiency in Pregnancy. *Central Asian Journal of Literature, Philosophy and Culture*, *3*(11), 191-199.
53. Mukhiddinovna, I. M. (2022). ENERGY DRINKS MAY AFFECT THE OVARIAN RESERVE AND SERUM ANTI-MULLERIAN HORMONE LEVELS IN A RAT MODEL. *BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIY JURNALI*, *2*(12), 626-632.
54. Mukhiddinovna, I. M. (2023). High Caffeine Exposure Increases Ovarian Estradiol Production in Immature Rats. *JOURNAL OF HEALTHCARE AND LIFE-SCIENCE RESEARCH*, *2*(3), 8-11.
55. Mukhiddinovna, I. M. (2023). Energy Fluids May Affect the Ovarian Reserve and Serum Anti-Mullerian Hormone Level. *Scholastic: Journal of Natural and Medical Education*, *2*(5), 358-364.
56. Mukhiddinovna, I. M. (2022). ENERGY DRINKS MAY AFFECT THE OVARIAN RESERVE AND SERUM ANTI-MULLERIAN HORMONE LEVELS IN A RAT MODEL. *BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIY JURNALI*, *2*(12), 626-632.
57. Ismatova, M. M. (2023). Energy Drinks May Affect the Ovarium. *American Journal of Pediatric Medicine and Health Sciences (2993-2149)*, *1*(8), 34-38.
58. Suratovna, S. S., & Muxiddinovna, I. M. (2023). Genetic Polymorphisms in Interleukin-1β (Rs1143634) and Interleukin-8 (Rs4073) Are Associated With Survival after Resection of

Intrahepatic Cholangiocarcinoma. *American Journal of Pediatric Medicine and Health Sciences (2993-2149)*, *1*(8), 39-46.

59. Хайдарова, Н. Б. (2023). Прогноз Недостаточности Плацентарной Системы У Беременных, Получавших Лечение От Covid-19 И Sars-Cov-2. Central Asian Journal of Medical and Natural Science, 4(5), 693-700.
60. 58.Sharipova N. M. (2023). Impact of Vitamin D Deficiency on Pregnancy. Central Asian Journal of Medical and Natural Science, 4(5), 705-712. Retrieved from https://cajmns.centralasianstudies.org/index.php/CAJMNS/article/view/1895
61. 59.Н. М., Ш. . (2023). Влияние Дефицита Витамина D На Течение Беременности. AMALIY VA TIBBIYOT FANLARI ILMIY JURNALI, 2(10), 59–63. Retrieved from https://sciencebox.uz/index.php/amaltibbiyot/article/view/8173