### МІНІСТЕРСТВО ОХОРОНИ ЗДОРОВ'Я УКРАЇНИ БУКОВИНСЬКИЙ ДЕРЖАВНИЙ МЕДИЧНИЙ УНІВЕРСИТЕТ»



## МАТЕРІАЛИ

105-ї підсумкової науково-практичної конференції з міжнародною участю професорсько-викладацького персоналу БУКОВИНСЬКОГО ДЕРЖАВНОГО МЕДИЧНОГО УНІВЕРСИТЕТУ присвяченої 80-річчю БДМУ 05, 07, 12 лютого 2024 року

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Матеріали підсумкової 105-ї науково-практичної конференції з міжнародною участю професорсько-викладацького персоналу Буковинського державного медичного університету, присвяченої 80-річчю БДМУ (м. Чернівці, 05, 07, 12 лютого 2024 р.) – Чернівці: Медуніверситет, 2024. – 477 с. іл.

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У збірнику представлені матеріали 105-ї підсумкової науково-практичної конференції з міжнародною участю професорсько-викладацького персоналу Буковинського державного медичного університету, присвяченої 80-річчю БДМУ (м. Чернівці, 05, 07, 12 лютого 2024 р.) із стилістикою та орфографією у авторській редакції. Публікації присвячені актуальним проблемам фундаментальної, теоретичної та клінічної медицини.

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**The aim of study** To conduct an analysis of literature data on microcytosis of the vagina, cervical canal, features of the course of pregnancy in case of fetal infection.

**Material and methods.** An analysis of the literature data for the last 10 years was carried out regarding the characteristics of IUI, the course of pregnancy, the development of possible complications, diagnosis, treatment and prevention.

**Results.** Intrauterine infection, as a complication, occurs as a result of hematogenous (transplacental) mainly viral or toxo-infection (TORCH-complex) with fetal damage or clinical manifestations of infection after the birth of a child, clinically manifested by a specific symptom complex and detected by examining the contents of the cervical canal, vagina, urethra and blood tests for the presence of specific antibodies (serological tests). In this case, the fetus is affected mainly during the early fetal period (9-22nd week of gestation) with the formation of congenital anomalies of development or a specific symptom complex (retarded fetal development syndrome, hydrocephalus, brain calcifications, hepatosplenomegaly, severe jaundice).

Quite often, there are situations when the presence of the infectious agent itself is not considered (except for the TORCH complex, this is a group of sexually transmitted infections, some opportunistic pathogens), but the consequences of the invasion of microorganisms - congenital malformations, placental dysfunction, retarded fetal development syndrome, worsening of the condition placenta This is accompanied by a decrease in all indicators of the biophysical profile of the fetus, an increase in the frequency of premature births, and both spontaneous onset of labor and asymptomatic structural changes in the cervix with subsequent premature discharge of amniotic fluid, disruption of the process of implantation and placentation (low placentation, placenta previa) are possible, the presence of blood discharge.

Penetration through the placenta is not possible for everyone. With syphilis, toxoplasmosis, herpes virus, cytomegalovirus, parvovirus 19, hepatitis, rubella, papillomavirus, paramyxoviruses, chicken pox and other viruses, penetration is possible, with gonorrhea, chlamydia and trichomoniasis, slight penetration, but this is not an obstacle to damage to the placenta or the development of changes, caused by the presence of an inflammatory process (shortening of the cervix, premature birth).

With the beginning of the II trimester of pregnancy, the cervical canal comes into contact with the amnion of the fetus and, in the presence of infection, microorganisms penetrate into the amniotic fluid. Amniotic fluid acquires antimicrobial properties only after the 20th week of pregnancy, so this period is the most dangerous for infection with microorganisms that are in the female genital organs.

**Conclusions.** The problem of intrauterine infection of the fetus remains important and relevant, despite the possibilities of modern diagnostics and treatment. Infection of the fetus and placenta under certain conditions can be dangerous for the further development of pregnancy and lead to termination of pregnancy.

#### Tsysar Y.V.

# THE RELATIONSHIP BETWEEN THE GENETIC DETERMINANT AND THE DEVELOPMENT OF MENSTRUAL FUNCTION IN ADOLESCENTS WITH CONCOMITANT PATHOLOGY

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**Introduction.** In the structure of gynecological diseases in adolescents and young women, functional disorders of the menstrual cycle occupy a significant place, in particular against the background of thyroid pathology.

The aim of the study is to establish thyroid pathology, the frequency of alleles and genotypes of the GP IIIa polymorphism gene in the structure of puberty menorahia in girls with concomitant tyroid pathology and to identify puberty menorahia risk factors based on genetic analysis.

Material and methods. 70 teenage girls, patients with puberty menorahia, who were treated in the gynecological department of the city clinical maternity hospital №1 in Chernivtsi were examined. Girls were divided into two groups: the first group (main) included 30 teenage girls diagnosed with puberty menorahia against the background of concomitant thyroid pathology, the second group (compative) consisted of 40 teenage girls diagnosed with puberty menorahia. The control group involved 25 almost healthy teenage girls. GP IIIa gene polymorphism (PLA1/PLA2) was studied once, after patients were included in the study, by selecting genomic DNA.

**Results.** The frequency of alleles and genotypes A1A2 of polymorphism of the GP IIIa gene was conducted in adolescents with menorahia, including thyroid pathology and in healthy teenage girls. It was found out that the incidence of occurrence "wild" A1 allele of the GP IIIa gene in teenage girls with menorahia is 2.41 times greater than "mutant" A2 allele: 99 (70.7%) 41 (29.3%) cases of 140 allocated allies ( |2=9.64, p=0.002). A similar trend was observed in the control group: A1 identified in 35 (70.0%) cases, which were 2.33 times more frequent than A2 alleles – 15 (30.0%) cases of 50 allocated alleles (|2=5.63, p=0.018). The resulting distribution by observation groups mirrored the total in the surveyed population, where prevailed "wild" allele over "mutant" in 2.39 times (|2=9.01, p=0.003). Epidemiological analysis of the risk of puberty menorahia against the background of pathology of thyroid depending on genotypes and alleed state of the GP IIIa gene thyroid pathology owed an incorrect increase in the likelihood of their appearance in carriers A2A2-, A1A2-genotypes and A2 allele in 1.33, 1.24 and 1.27 times, respectively (OR=1.37-1.46, p≥0.05), for the lowest chances of menorahia in adolescents without disease (OR=0.69-0.73, p≥0.05). Instead, A1A1-genotype and A1 allele were associated with puberty menorahia without concomitant pathology of thyroid (OR=1.60 and OR=1.40, p>0.05), with a low probability of their occurrence against the background of diseases (OR=0.63, p>0.05).

**Conclusions.** In adolescents with menorahia without thyroid disease A1A1 genotype occurs 11.7% more frequently than in those with thyroid disease (|2=4.01, p=0.041) and 15.0% more frequent than in the control group (|2=4.54, p=0.033). Whereas in girls with menorahia and thyroid pathology, the relative frequency of A1A2-genotype is 9.2% (|2=3.97, p=0.052) and A2A2 genotype by 2.5% (p>0.05) above these in adolescent groups. Among girls with pubertic menorahia, menorahia are 10.0% more likely to occur in carriers of A1A1-genotype, control (|2=9.86, p=0.002), while controlling 18.6% more heterozygot carriers A1A2-genotype than in both surveyed groups (|2=12.03, p<0.001).

## Voloshynovych N.S. THE ROLE OF INHIBIN-B IN THE DIAGNOSTICS OF FEMALE STERILITY

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**Introduction.** A diagnosis of infertility is made if a sexually active couple who does not use contraception fails to achieve pregnancy within one year. According to the World Health Organization (WHO), the number of infertile couples worldwide reaches 5%, which is about 70 million. In Ukraine, the number of infertile couples reaches almost 20%. This is a serious pathology, which is faced by approximately 15% of couples worldwide, and can have many causes and consequences. In particular, a huge percentage of infertile couples suffer from the endocrine factor of infertility.

The aim of the study. To study the role of inhibin-B in the diagnosis of female infertility according to the scientific literature. To determine the expediency of researching the concentration of inhibin-B in the infertility diagnosis algorithm.

**Material and methods.** This study analyzed the scientific literature on the effects of inhibin on female infertility. Also, in the process of work, individual patient records of the gynecological department for the last 2 years (from 2022 to 2023) on the basis of the Chernivtsi Regional Clinical Hospital were analyzed. Reproductive dysfunction was detected in 20% of women. All patients underwent a comprehensive examination, including a general blood test, a general urine test, a