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



### МАТЕРІАЛИ

104-ї підсумкової науково-практичної конференції з міжнародною участю професорсько-викладацького персоналу БУКОВИНСЬКОГО ДЕРЖАВНОГО МЕДИЧНОГО УНІВЕРСИТЕТУ 06, 08, 13 лютого 2023 року

Конференція внесена до Реєстру заходів безперервного професійного розвитку, які проводитимуться у 2023 році №5500074

reliable factors when choosing organ-preserving operations that lead to loss of reproductive function.

The aim of the study. The purpose of the work: to increase the efficiency of diagnosis, treatment and objectification of the prognosis of recurrence of endometrial hyperplasia based on the study of markers of apoptosis, proliferation, receptor and oxidative status and hormonal homeostasis in women of childbearing age.

Material and methods. 60 patients of reproductive age with a morphologically hormonally confirmed diagnosis of endometrial hyperplasia in the absence of therapy during the last 3 months were examined. The control group consisted of 20 patients without endometrial pathology. Hysteroscopy was performed from the 6th to the 11th day of the menstrual cycle. The surgical material was subjected to morphological examination. Histological and immunohistochemical examination of tissue endometrium and polyp of the uterine body was carried out according to the generally accepted methodology at the Department of Pathologic anatomy of the Bukovinian State Medical University.

**Results.** Recurrent forms of endometrial hyperplasia develop due to increased expression of estrogen and progesterone receptors in simple and complex forms of endometrial hyperplastic pathology, which is accompanied by maximally expressed changes in lipoperoxidation processes (increase in the content of lipid peroxidation products (2.2 and 2.6 times the level of effective diene conjugates), 1.6 and 2.3 times the content of malondialdehyde, p<0.05) and a decrease in the power of antioxidant protection (decrease in the activity of catalase by 1.3 times, superoxide dismutase by 1.2 times, p<0.05) in women. In the women of the main group, an increase in the oxidative modification of proteins was shown, in particular vimentin in 1.8, p<0.05 and Willebrand factor in 1.7, p<0.05 times. According to the picture of the long end, because it was characterized by lymphohisticytic infiltrates with admixtures of plasma cells and the accumulation of fibroblasts between the indicated cells. Patients with isolated endometrial hyperplasia are characterized by pronounced hypogestageny in the luteal phase of the menstrual cycle (5.35±4.53 ng/ml, p<0.05) and a decrease in the fertility index (FSH/LH=1.4, p<0.05). In patients of the main group, a significant decrease in progesterone content was noted (9.32±5.65 ng/ml, p<0.05).

**Conclusions.** On the basis of the established relationships between the structural and functional state of the endometrium, its morphological, immunohistochemical features and the hormonal homeostasis of the reproductive system, a pathogenetically justified complex of anti-relapse treatment of patients with hyperplastic endometrium was developed, which ensures the full formation of the normal structure of the endometrium by 31.2%, improvement of fertility and implementation of the reproductive function by 22,9%.

# Yasnikovska S.M. CORONAVIRUS INFECTION EFFECT ON THE COURSE OF PREGNANCY AND CONDITION OF NEWBORNS

Department of Obstetrics, Gynecology and Perinatology Bukovinian State Medical University

**Introduction.** Nowadays, still the information concerning the possibilities of physiological adaptation of pregnancy to infectious conditions, severity of acute respiratory syndrome and possible development of complications in the pregnant with COVID-19 is rather limited and disputable.

**The aim of the study.** To study the effect of coronavirus infection on the course of pregnancy and newborn condition.

Materials and methods. 29 individual prenatal records of pregnant women with positive PCR on SARS CoV-2 were analyzed. The women were registered at one of the maternity welfare centers due to their pregnancies at Chernivtsi Municipal Maternity Home №2 during 2021.

**Results.** Positive PCR on coronavirus was found in women in different terms of gestation. Thus, 9 (31,04%) patients were in the first trimester including two of them on the 4-5 weeks of gestation. In the second trimester coronavirus infection was diagnosed in 5 (17,24%) women, and in

the third trimester – in 15 (51,72%) of the examined patients. 17 (58,62%) women experienced a mild course of the disease, 7 (24,14%) women – a moderate one, and 5 (17,24%) of them – severe course of the disease. One of them (3,45%) was in extremely severe condition and was supported by ALR till delivery.

Two women (6,89%) out of 29 of the examined ones lost their babies: spontaneous miscarriage was at the 15-16 weeks of gestation, and missed abortion at the 8-9 weeks. It should be noted that both women were infected with SARS CoV-2 at the 4-5 weeks of gestation. The outcome of pregnancy of the other 26 women (96,3%) was timely delivery, and one of them (3,7%) had premature delivery due to extremely severe course of coronavirus infection. 13 (48,15%) women had physiological labor, and 14 (51,85%) patients underwent cesarean section. For 13 of them indications for cesarean section were obstetrical complications not associated with SARS CoV-2. Only 1 patient who was on artificial lung ventilation had indications for surgery at the 32-33 weeks of gestation due to her critical condition because of coronavirus disease.

All the 27 children were born alive and full-term. The following exceptions were found: one baby born at the 32-33 weeks to a woman with extremely severe course of the disease, and one baby had low birth weight according to the term of gestation.

During analysis of the prenatal records of pregnant women we admitted that the majority of cases (15 out of 29) of coronavirus infection were registered during the third trimester of gestation. Those infected at the 30-32 week of pregnancy (5 patients) had a severe course of the disease. One of them was in a critical condition. The patients infected with SARS CoV-2 during the second trimester had a mild course of the disease, though the number of further complications increased. Those pregnant women infected with SARS CoV-2 during the first trimester had a mild course of the disease. Meanwhile, the threat of miscarriage was the highest in this group, and it was registered in two cases. A considerable direct effect of SARS CoV-2 on the condition of the fetus, neonate and the way of labor was not found. The babies born to mothers with SARS CoV-2 were not characterized by more frequent pathological course of the early neonatal period, and the signs of acute respiratory viral infection were not observed.

**Conclusion.** The sample of patients is rather small and does not allow us to conclude concerning the coronavirus effect on pregnancy and fetal condition. Nevertheless, these data form the basis for further studies on the effect of a new SARS CoV-2 produced on the course of the gestation, delivery and neonatal condition.

#### Yuzko O.M.

# COMPARATIVE CHARACTERISTICS OF PATIENTS WITH INFERTILITY WHEN APPLYING MELATONIN IN COMPLEX PREPARATION FOR ASSISTED REPRODUCTIVE PROGRAMS

Department of Obstetrics and Gynecology Bukovinian State Medical University

**Introduction.** More than 50,000 cases of infertile couples are registered annually in Ukraine. The main method of their treatment is assisted reproductive technology (ART). The search for more effective treatment of infertility with IVF continues. In order to improve the effectiveness of ART, the issue of preparing infertile couples remains relevant. In recent years, melatonin as a possible marker of ovulatory reserve and its use in IVF programs to increase their effectiveness has attracted the attention of scientists.

The aim of the study was to conduct a retrospective comparative characterization of patients with infertility who took or did not take melatonin with assisted reproductive technologies.

**Material and methods**. 89 women were examined. The first (control) group included 13 healthy women oocyte donors who got pregnant on their own and gave birth to their own healthy children, the second group - 33 patients with infertility, who took 3 mg of the preparation "Vitamelatonin" produced by "Kyiv Vitamin Plant" at the same time before bedtime, two weeks before and during ovulation stimulation, the third group - 43 patients with infertility who did not take melatonin preparation before and during ovulation stimulation. There were no women who worked