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



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### СЕКЦІЯ 11 АКТУАЛЬНІ ПИТАННЯ АКУШЕРСТВА, ГІНЕКОЛОГІЇ, ДИТЯЧОЇ ТА ПІДЛІТКОВОЇ ГІНЕКОЛОГІЇ

#### Babii N.V.

## FEATURES OF THE DIAGNOSIS OF HEART FAILURE IN PREGNANT WOMEN WITH PREECLAMPSIA

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**Introduction.** New research shows that pregnant women with preeclampsia are much more likely to develop heart failure later in life than those without pregnancy-related blood pressure complications, especially in repeat pregnancies.

The aim of the study. diagnosis of heart failure in pregnant women with preeclampsia.

Materials and methods. The immunochemiluminescent research method was used.

Results. We conducted a study of the level of NT-proBNP in the blood of pregnant women with preeclampsia (this was an experimental group) and in healthy pregnant women without any pathology (control group) and found an increase in this marker in the experimental group. This indicates that pregnant women with preeclampsia need additional examination to detect heart failure and its timely prevention. It is worth paying attention to the main diagnostic tests when arterial hypertension and preeclampsia are suspected: 1. Primary diagnosis: ophthalmoscopy, electrocardiogram, level of hemoglobin, platelets, fibrinogen, level of creatinine in blood serum, glomerular filtration rate, level of electrolytes. 2. Specific tests: determination of cardiac troponin, N-terminal propeptide of natriuretic hormone (NT-proBNP) (if heart failure is suspected), sFlt-1/PIGF (preeclampsia excluded), echocardiography, computed tomography or magnetic resonance imaging, ultrasound diagnostics of kidneys and duplex dopplerography of arteries. 3. Assessment of the state of the fetus: electrocardiography of the fetus, ultrasound diagnosis of the fetus, assessment of amniotic fluid, dopplerometry of the uterine arteries. It is desirable to advise women who have experienced preeclampsia measures to achieve and maintain a body mass index within a healthy range (18.5-24.9 kg/m2) until the next pregnancy. In women who have had preeclampsia or gestational hypertension with preterm delivery before 34 weeks, consider counseling before the next pregnancy to discuss the possible risks of recurrent hypertensive disorders and how to prevent them. When a woman who has suffered from gestational hypertension or preeclampsia is discharged from a hospital after childbirth, it is necessary to draw up a management plan for continued observation by a general practitioner - family medicine.

**Conclusions.** Therefore, pregnant women from the risk group should be advised to take 100-150 mg of acetylsalicylic acid daily from 12 weeks to 36 weeks of pregnancy in the evening (when prescribing acetylsalicylic acid, the dose of folic acid should be increased to 800 mcg per day) and 1.5-2 g of calcium (1 g of elemental calcium is contained in 2.5 g of calcium carbonate or 4 g of calcium citrate) from 16 weeks of pregnancy (during meals).

#### Bakun O.V.

# MARKERS OF PERITONEAL DAMAGE IN THE DIAGNOSIS OF ENDOMETRIOSIS ASSOCIATED WITH FERTILITY

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**Introduction.** The problem of infertility has an important socio-medical significance, which is caused by a sharp drop in the birth rate in the conditions of the current crisis. Despite years of research, endometriosis remains a disease of unknown etiology. Its prevalence is constantly increasing and is 15-50% of the entire population of women of reproductive age. The high social significance of the problem of endometriosis is determined by the fact that 30-40% of women with endometriosis suffer from infertility. In women with endometriosis, the addition of complications increases the level of stress, and the need for surgical correction creates prerequisites for

psychosomatic disorders, which are additional risk factors in such patients. That is why there is an active search for the most effective minimally invasive options for diagnosis and therapy.

The aim of the study is to determine the level of mesothelin in blood serum and peritoneal fluid in women with endometriosis associated with infertility, to compare it with the level in healthy women

**Materials and methods.** We determined the level of human mesothelin in blood serum and peritoneal fluid in patients of the main group (30 women with endometriosis associated with infertility) and in the blood serum of the control group (11 healthy women) by the ELISA method.

**Results.** The average age of women in the main group was not significantly different from the age of patients in the control group, these indicators were  $29.4\pm0.4$  and  $26.6\pm0.9$  years, respectively (p>0.05). Significant majority in the number of women with menstrual function impairment testified to the possibility of endometriosis initiation in the group under study. The level of mesothelin in blood serum was determined equal to  $0.73\pm0.01$  in main group and  $0.29\pm0.01$  - in control group (p<0.05). The level of mesothelin in peritoneal fluid in main group was  $0.55\pm0.01$ .

**Conclusions.** Considering the fact that the level of mesothelin was found to be elevated in endometriosis associated with infertility, it can be considered a non-invasive marker of peritoneal damage in the diagnosis of endometriosis. The level of mesothelin is recommended to be determined in women with external genital endometrios with the purpose of early diagnosis.

### Dubyk L.V.

# THE ROLE OF DOPPLEROMETRY IN UTERINE, RADIAL AND SPIRAL ARTERIES IN EARLY SPONTANEOUS ABORTIONS ON THE BACKGROUND OF ENDOTHELIAL DYSFUNCTION

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**Introduction**. Early loss of pregnancy is one of the leading problems of obstetrics. Loss of desired pregnancy is observed in 30% of cases. Doppler blood flow study of the uterine, radial and spiral vessels is important for determining the course of pregnancy. According to many scientists, the success in solving the problem of the early perinatal loss lies in a deeper study of the etiopathogenesis of this problem. Therefore, the priority is to search for markers that will detect preclinical forms of the threat of abortion, which will allow prolongation of pregnancy and reduce perinatal losses.

The aim of the study is to determine the role of dopplerometry in uterine, radial and spiral arteries in early spontaneous abortions on the background of endothelial dysfunction.

Materials and methods. We have examined 34 women with spontaneous abortion (Group I) and 29 women with blighted ovum (Group II) and were in inpatient treatment at the gynecological department of MHCF "City clinical maternity hospital №1". The change in level of the markers of endothelial dysfunction was found in all examined patients. The concentration of endothelin-1 increased 3-5 times as much, nitric oxide decreased 1,7-2 times as much, and E-selectin −1,3-1,6 times as much in the blood, which is indicative of the development of endothelial dysfunction in women with pathology of pregnancy. Doppler study of uteroplacental blood flow was carried out using the ALOKA SSD-2000 scanner.

**Results.** In case of spontaneous abortion, the size of the embryo corresponded to the normative values for this term of gestation. In 100% of cases, hypoechoic structures of various sizes were visualized, which communicated with the uterine cavity and were identified as chorionic detachment. The blood flow in this group of vessels was characterized by a rather high systolic component, the presence of a diastolic component, and in 29.4% of cases, a protodiastolic incision. The dopplerometric study was characterized by a decrease in IR and IP in the uterine, radial and spiral arteries of gestation by 1.5-2.2 times. In a case of blighted ovum the size of the embryo did not correspond to the normative values of this term of gestation. The heartbeat of the embryo was not determined. At 7-8 weeks of gestation in 18 of 29 women (62.1%) showed a rapid increase in IR and IP of all groups of uterine arteries which indicated a significant increase in peripheral