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Indexes of arterial blood flow in the utero-placental and fetal-placental circulation

The aim of this study was to assess the normal ranges for S/D ratio and pulsatility index (PI) for umbilical artery (UA), aorta (A), middle cerebral artery (MCA), renal artery (RA) and uterine artery (UtA) during normal pregnancy. Results showed decrease of S/D ratio and PI for UA, UtA from 8 to 40 weeks of gestation and PI for RA from 20 to 40 weeks of gestation. S/D ratio and PI for A was not changed during second half of normal pregnancy. S/D ratio and PI for MCA were increased from 20 to 30 weeks of gestation and after that had tendency of decreasing to term.

V. I. Kulakov, V. I. Serov,
V. M. Sidelnicova

Prematurely delivery — observation tactics with account to gestation terms

Some disputable matters according to the problem of prematurely labor were presented in this article.

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S. A. Selkov, T. A. Pluzhnikova,
O. V. Tishkevitch, A. V. Fedorenko,
E. A. Shapovalova

The role of antiphospholipid antibodies on the pathogenesis of habitual pregnancy loss

Clinical and anamnesis analysis as well as analysis of the course and outcome of the present pregnancy was performed on 595 patients with complicated obstetrical and gynecological history (COGH) — habitual pregnancy loss, infertility, genital chronic processes. Control group consisted of 50 healthy women. Immunofluorescent analysis was used to reveal antiphospholipid antibodies on blood plasma. Antiphospholipid antibodies were found in 42% of COGH women. No antiphospholipid antibodies were seen in the control group. In all patients of the studied group the course of pregnancy was accompanied with signs of threatened abortion, gestosis. 29% ($p < 0,01$) patients had preterm labor and spontaneous abortion occurred in 18% ($p < 0,01$) of cases. Perinatal mortality was $9,8\% \pm 4, 16$.

V. M. Sidelnicova, V. V. Sosnina

Common loss of the 1-th three months gestation. observation tactics

The common loss of gestation is a polyetiological complication during pregnancy time, where together with causes and factors of embryo/fetus peril there are destructions of the conjugal reproductive system. Main disturbances due to abortions in early terms are cariotype breakages: chromosome translocations and inversions were revealed in 8,8% of inspected conjugal pairs, "cariotype peculiarities" in 72, 7%, conjugal compatibility according to HLA more 3 antigens was detected in 59,3%. Disturbances of trophoblast invasion processes and placenta formation are evident because of hormonal distortions (NLF, hyperandrogeny), autoimmune distortions and chronic endometritis with high level of anti-inflammatory cytokines. The development of placenta insufficiency in patients with these disturbances leads to pregnancy interruption.

L. A. Samorodinova,
T. L. Kormakowa

Abortion pregnant: immunological and gormonale aspects

The object of the research is to study the condition of humoral and cellular immunity of pregnant women with imminent and incipient abortion, as well as study the gormonal function of syncytiotrophoblasts. The study of immune status of pregnant with abortion showed the considerable reduction of suppressor activity and increase of the activity of immunity helper unit. After the completion of therapy, increase in suppressor activity was mentioned, as well as approach of laboratory figures to the ones of healthy pregnant women. The study revealed quick reduction of placental lactogen and beta-trophoblastic globulin of pregnant with abortion, retention of low figures of these hormones during the whole period of gestation process. These data should be considered as the appearance of placental deficiency.

**Role of conditional-pathogenic
microscopic flora in the pregnancy
loss development**

The pregnancy loss problem is topical for obstetrical practices nowadays. Last years investigations based on anaerobic bacteriology achievements have changed traditional aspects of these diseases microscopic etiology and in concordance with it on their diagnostics. The new data obtained assert disbiotical disturbances in vagina biological field in pregnancies have influenced on it. Representatives of conditional-pathogenic microscopic flora have the main etiologic significance in it.

The present work aim was studying the role of conditional-pathogenic microscopic flora in pregnancy loss.

N. G. Kosheleva, P. S. Buzurukova,
T. P. Vosheva, T. M. Crawl

**Features Central Blood Circulation
at Women with Normal and
Pathological Current of Pregnancy**

Features central blood circulation at 386 women are investigated: 60 healthy not pregnant women, 53 healthy pregnant, 147 women with threat of interruption of pregnancy and 126 with gestosis. Distribution on types of central blood circulation at healthy pregnant differed from healthy not pregnant. The increase of frequency eucinetetic blood circulation in 2 times and demotion of frequency hypocinetetic blood circulation in 3 times took place.

At development gestosis the increase of frequency hypocinetetic blood circulation was observed: at hypostases pregnant – in 3 times, and at nephropathy – in 6 times in comparison with healthy pregnant.

At threat of interruption of pregnancy distribution pregnant on types is similar with not pregnant.

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O. N. Arganova, T. P. Bespalova,
G. L. Gromiko, E. A. Shapovalova,
O. V. Tishkevich

**Immunomorphological condition of
placentas in women with repeated
pregnancy losses under action of
different antigens**

The aim of the research was to investigate the pathomorphological changes in placentas of women with recurrent pregnancy losses under action of different injuring stimulus (infection, hormonal, biochemical reactions on membrans of syncytiotrophoblast and endothelium of placental vessels, actions of antiphospholipid antibodies). Identical changes was detected which connected with immune complexes (IC) formation. IC with different composition generate immunopathological processes in placental tissues. Present of antiphospholipid antibodies on placental membranes enhancing immunopathological processes, leading to dystrophic and necrotic lesions in surrounding tissues and to placental insufficiency. The outcome of this lesions is incompetent pregnancy.

Therefore IC may be the marker of placental injury and insufficiency as well as a biologic indicator of failure in reproductive system.

The treatment of threatened abortion is improve pregnancy outcomes and immunomorphological evidence.

E. V. Komlichenko, L. V. Ivanova,
E. L. Nezhentseva, L. H. Kim,
V. F. Bezhenar

**peculiarities of pregnancy
interruption in female patients
with syphilis**

One presented in this article the analysis of pregnancy interruption peculiarities in 140 women with various syphilis forms. Peculiarities of the reproductive and social anamnesis were shown in mentioned categories of women. Regularities between syphilis morbidity and indices of reproductive health of women were detected. Elaboration perspective ways of syphilis and pregnancy problem were outlined.

N. A. Masljanuk

**The early neonatal period of
neonates born after multiple
pregnancies after in vitro
fertilization**

In this article are analyzed peculiarities of early postnatal adaptation of 131 neonates born after multiple pregnancies after in vitro fertilization. I was seen that 88,3% of infants had dichorial type of placentation. 64,9% of infants were born prematurely. The frequency of two-fold higher (gestational age 28–32 weeks). The leading place in perinatal pathology belonged to intrauterine chlamidial infection.

Respiratory insufficiency in premature children

Pathology of respiratory system plays a significant role in morbidity and mortality of premature neonates and it means that searching of new and remodeling of existing methods to diagnose and treat respiratory insufficiency (RI) is of particular importance. We evaluated a new method of an early preclinical diagnosis of RI based on using of capnography – assessment of end-tidal CO₂ concentration, which makes possible to propose a leading pathophysiological mechanism of RI. Using of the gradient between end-tidal and capillary CO₂ concentrations helps to predict development of serious ventilation-perfusion mismatch when it exceeds 20 mm Hg. So, in the treatment of RI in neonates individualized therapy should be used, based on the assessment of the leading pathophysiological mechanism.

V. A. Kulavsky, L. A. Dautova,
E. V. Kulavsky

Medico-social and demographical tendencies in forming of reproductive health

In the article the medico-social and demographical tendencies in forming of reproductive health are minutely considered. Among them there are: mass prevalence of little number of children in the family, postponement of the date of the first child's birth, increase of illegitimate birth rate and change of optimal reproductive age coefficients of women groups may be mentioned. Changes of reproductive conduct have the great significance in the organization of obstetric-gynaecological care. Methods of dispensary observation including psychological training of married couples for delivery demand perfection. Pregnancy and delivery conducting of women incoming the groups of high risk of maternal and perinatal pathology also expects attention.

A. M. Savitcheva, M. A. Bashmakova,
O. N. Arzhanova, N. G. Kosheleva

Infections in Pregnant Women (diagnosis, treatment, prophylaxis)

The article presents a review of new literature and own data resulted from a many-years study of infections in pregnant women. Pathogenesis and diagnosis of transplacental infections which demand serologic screening, prophylaxis and treatment of pregnant women is discussed. Attention is paid to urogenital infections (chlamydiosis, genital herpes, candidiasis, trichomoniasis), genital colonization with group B streptococci, mycoplasma, association of different bacteria. Informative methods of laboratory diagnosis and schemes of antibacterial therapy are given.

U.V. Tsveliov, S.V. Divin

Modern views on cure-diagnostics tactics of pregnancy and delivery observation in women with pelvic traumas and post-traumatic altering support-moving apparatus (literature review)

The modern literature review concerning diagnostic and cure tactics during observation of pregnancy and delivery in women with pelvic traumas and post-traumatic altering support-moving apparatus is presented in this article. The diagnostic tactics based on the accurate assess of clinical data and on analysis of laboratory and instrumental research methods have been substantiated for estimation of pregnant woman and fetus conditions with available pelvic injures. It allows make more exact prognosis, select criteria of pregnant for the conservative conduction; establish indices for the operational cure.

N. G. Kosheleva, T. A. Pluzhnikova

St. Petersburg centre of the unbearing pregnancy prophylactics and treatment. results of the scientific and practical activity

The results of the twelve-year work of the St. Petersburg Center for the Prevention and Treatment of Miscarriage (NB) have been summed up. During this time, 6755 women, 2856 pregnant women and 3899 non-pregnant women were observed at the Center. Women suffering from misdiagnosis received a comprehensive comprehensive examination, on the basis of which the prevention and treatment of NB was carried out. This made it possible for women with 100% loss of pregnancies in the past to achieve a decrease in the frequency of spontaneous abortions in 2001 to 7.6% and premature births to 2.7%.

O. E. Talantova

Particularities of morphogenesis of human fetus brain

The review is devoted to the basic events of human fetal CNS development. The cellular processes of two broad phases of cerebral morphogenesis - cytotogenesis/histogenesis and differentiation/growth - are described. In this review we also concern the main regressive events in the CNS development such as programmed cell death (apoptosis), axonal pruning and synapitic elimination. Different environmental factors may effect human brain development even from its early stages causing brain injury that can result in major or minor cerebral malformations. So, the knowledge of the main questions of fetal brain morphogenesis can help to prevent some abnormalities of CNS in the future child development.

Mark evaluation scale of gestosis gravity degree

One elaborated the new mark evaluation scale of gestosis gravity degree with use of modern recommendations of the Worldwide health organization (WHO) and International hypertension society (1999) and the Scientific society for studying of arterial hypertonicity in Russian Federation (2000). According to mark sum one distinguishes gestosis of light form (0-12 marks), middle gravity gestosis (13-16 marks) and heavy gestosis (17 marks and more ones). Quantitative evaluation scale of gestosis gravity degree allows uniformly gestosis assess, make prognosis of gestosis course and determinate the treatment effectiveness.

Who was the first obstetrician in Russia?

It is rightly believed that the establishment of scientific obstetrics in our country was facilitated by the opening of "women's schools" (1757), the creation of Educational homes in Moscow (1764) and St. Petersburg (1771), the activities of the first Russian professor and "father of Russian obstetrics" Nestor Maksimovich Maksimovich-Amvodik. However, these transformations and the emergence of a domestic obstetric school could not arise out of nothing, out of nowhere. The basis for them was the activity of foreign and Russian doctors who worked in Russia at the beginning of the 18th century.

The use of the drug "duphaston" in women with a history of miscarriage to prepare for pregnancy and treat the threat of termination of pregnancy

The aim of the study was to evaluate the use of the drug duphaston: 1) to prepare for an upcoming pregnancy in women with hyperandrogenism and insufficiency of the luteal phase of the cycle; 2) to treat the threat of termination of pregnancy in women with a history of miscarriage.

The use of duphaston in women suffering from miscarriage has confirmed its high efficiency both in preparation for pregnancy in patients with hyperandrogenism and insufficiency of the luteal phase of the menstrual cycle, and in the treatment of threatened abortion.

In 93.5% of women with a history of 100% fetal loss, it was possible to bring the pregnancy to delivery.