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Fetal brain venous return in complicated pregnancy

Objective. To estimate the fetal brain venous return in the complicated pregnancy.

Methods. Blood flow waveforms (BFW) in jugular vein (JV) were recorded in 162 fetuses from 13 to 40 weeks of normal gestation and in 63 growth restricted fetuses. Peak velocity in ventricular systole (S), peak velocity in early diastole which corresponds to passive ventricular filling (D), peak velocity in atria contraction with active ventricular filling (A), mean velocity (TAV) were measured and pulsatility index ($PIV=S-A/TAV$), systolic to diastolic ratio (S/D) were calculated.

Results. S, D, A, TAV in growth restricted fetuses were significantly greater and PIV, S/D were significantly lower than in normal fetuses after 36 weeks of gestation.

Conclusions. The results demonstrate that there are neuroprotective reactions of fetal cerebral venous blood flow after 36 weeks of gestation.

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The special biochemical measures to women with OPG-gestosis, having an artificial abortion in their anamnesis

The goal of the present work consists in usage of biochemical methods complex, which allow estimating the peculiarities of pregnancy current of women with OPG-gestosis, complicated by artificial abortion in their anamnesis. There were studied 45 pregnant women in the age 21-36 years with OPG-gestosis (20- first-pregnant – the 1-st group) and 25 – repeatedly-pregnant women, who had from 1 to 5 artificial abortions in their anamnesis (the 2-nd group) and 17 women with physiological pregnancy (control group). The intensity of lipid peroxidation was measured by level of a final product – malonic dialdehyde (MDA). Its concentration in erythrocytes and plasma was the highest (25 % and 34% accordingly) at 2-nd group in comparison with control group. In addition, there were lipid the activity reduction of antioxidative system basic component – erythrocytes superoxidodismutase (SOD) 11,8 – 12,74 % at all women with OPG-gestosis. Identical changes were observed relative to methemoglobin level and ammonium concentration in all women with OPG-gestosis (there were rise in 271-296 % and 35% accordingly, in comparison with control group). The rise of endogenous intoxication level correlated with decrease ones in plasma. Concentration of middle and low molecular mass of compounds in erythrocytes was higher in 14 and 9%, and was 13 and 6% lower in plasma accordingly in 1-st and 2-nd groups, in comparison with control. Analysis of data leads to a conclusion that pregnant woman with OPG-gestosis, complicated by artificial abortion in their anamnesis, and had more considerable changes of lipid peroxidation and endogenous intoxication level.

E. A. Butova T. V. Kadtsyna

The peculiarities of the period of pregnancy and labor in women with chronic placental insufficiency and infection

The structure of perinatal and neonatal pathology has a permanent trend of growth of the part of in womb infections. Having a target of studying the peculiarities of pregnancy and labor of women with chronic placental insufficiency and infection, there were chosen 96 women that made up two groups:

- The 1st group (63 pregnant women) – with different infectious pathology (without signs of feto placental insufficiency)
- The 2nd group (33 pregnant women) – with infectious pathology and chronic feto placental insufficiency

The diagnosis of chronic feto placental insufficiency was based upon the data of Ultra-Sound Research, Cardio-Toco Graphics, Ultra Sound Dopplero Graphics and some information that concerned the infant: the length of the body, its weight and its condition according the Apgar scale. The diagnosis of infectious pathology was confirmed by immunological methods of research: immunoferritin analysis and analysis of immunofluorescentation. To verify the data of influence of mix-infections on feto placental complex there was made an examination of placenta.

The results of the examination showed that the pregnancy on the infection background, especially in combination with chronic feto placental insufficiency is frequently became complicated with interruption of pregnancy, violation of in womb development and as a result lower index of conditions of health of infants.

This research confirms the necessity of picking out a group of risk because of formation of chronic feto placental insufficiency within pregnant women with infection. This group of risk consists of pregnant women that have in their

anamnesis infection diseases of sexual organs or complications during the previous pregnancies. The precise revelation and healing of infectious inflammation diseases of women's genitals will seriously decrease complications of pregnancy and perinatal sicknesses.

A. A. Polyanin, I. J. Kogan

Role of atrial natriuretic peptide (ANP) in feto-placental and maternal circulation

ANP was measured in maternal cubital vein (M), umbilical vein (UV) and artery (UA) in 39 women at term delivery (23 vaginal, 16 caesarean): 15 - normal pregnancy; 24 pregnancies were complicated by placental insufficiency, 14 - by preeclampsia, 10 - by diabetes mellitus. Blood gases and pH in UA, UV were measured.

M, UA, UV ANP at caesarean section was similar to that in vaginal delivery ($p > 0,05$). In normal and complicated pregnancies, UA ANP was significantly higher than ANP in M and UV. In pregnancies complicated by diabetes mellitus, UV ANP was higher than ANP in UA (21,93 fmol/l and 13,03 fmol/l). In pregnancies complicated by acute placental insufficiency, UV ANP was significantly lower than that in UA in normal pregnancy ($p < 0,001$). There is positive correlation between ANP concentration and pH in UV.

Fetus is capable of ANP production. ANP may be synthesized in the placenta.

Fetal hypoxia appears to be a potent stimulus for elevating of ANP plasma concentration.

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S. B. Tkachenko, L. N. Jurchenko,
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Development conception of systemic inflammatory response on gestosis model

In this work, the results are reported concerning studies of homeostasis in 719 patients-women with pathologically (gestosis) and physiologically continuing pregnancy in gestation dynamics and in 30 women without pregnancy. One analyzes namnestic, clinical and also 154 paraclinical indexes in the following systems: hematological, hemocoagulable, acute stage proteins, immune, endothelial, pro- and anti-oxidative, mother and fetus hemodynamics, gas homeostasis, functional detoxification system. The obtained data allowed consider the analogy between homeostasis change at gestosis and system inflammatory response syndrome (SIRS), form the functional development scheme SIRS during pregnancy with gestation stages verification. Comparing SIRS stages, which we put in estimation of the character of continuing pregnancy, with traditional gestosis criteria has permitted to classify the gestosis gravity degree tacking into account SIRS staginess.

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V. S. Baranov

Peculiarities of pregnancy course and outcome in women with confined placental mosaicism

The pregnancy complications and perinatal outcomes in 12 patients with confined placental mosaicism (CPM) were studied. Among them abnormal high level of MShCG ($> 2\text{MoM}$) was noticed in five patients. Increased resistance in the uterine artery was found at 20 and 36 weeks of pregnancy in women with CPM. Stillbirth was registered in 1/3 of cases; intrauterine growth retardation was detected in j of patients. Morphological signs of the placental insufficiency and villi immaturity were detected in all placentas. Our data reflect a possible negative influence of CPM to the pregnancy outcomes.

M. A. Repina, N. J. Krylova,
G. V. Mitchenko, J. A. Kornilova

One has carried out the systemic enzymatic therapy influence on clinical proceeding purulent-inflammatory adnexal diseases. It was demonstrated that the inclusion of systemic enzymatic therapy preparation <wobenzyme> in the complex cure of piosalpingitis, piosalpingisis, tuboovarial abscess, pelvioperitonitis accelerates significantly the recovery process, decreases the frequency of operative intrusions into adnexa, influences positively on vaso-trombocitary homeostasis. The economical expediency is noted for prescribing this preparation <wobenzyme>: duration of antibacterial and infusion cure is decreased, therefore expense for dear preparation is reduced, and hospital bed-day is decreased.

E. P. Shatunova

Comparative microbiological investigations in patients with salpingoophoritis

The examination of 100 patients with acute & 413 patients with purulent chronic stages inflammatory diseases of uterine adnexa confirmed different etiology structure. The investigation of adnexal exudation can give the evidence of the possible etiologic role in women with salpingoophoritis. The present data led to use etiotropic drugs in treatment patients with pelvic inflammatory diseases.

N. V. Artymuk, G. A. Ushakova

Peculiarities of puberty of girls, born by women with neuroendocrine form of hypothalamic syndrome

In this article data were collected about puberty of the girls, born by women with neuroendocrine form of hypothalamic syndrome. The author studied their physical, sexual development, hormonal status, ultrasound investigations of small pelvic. In the course of investigations serious disturbances of puberty were found out in girls, born by women with neuroendocrine form of hypothalamic syndrome, which could lead to the reproductive potential decrease and therefore require the development of treatment and prophylaxis measures.

Attempt of using the transcranial electrostimulation within premenstrual syndrome treatment

It established, that the pathogenetical base of PMS clinical manifestations is B-endorphin and serotonin deficiency; with this occurrence symptom gravity increases as their levels decrease. In this connection transcranial stimulation (TES) use in optimal mode for endorphinergic and serotonergic components of protection cerebral mechanisms activation elaborated in the Institute by I.P. Pavlov. Treatment results have manifested that TES is the high efficiency method of curing PMS without drugs. On the background of TES therapy women noted good spirits, disappearing menstrual pains, disappearing nausea and vomiting, menstrual cycle normalization. This procedure obvious influence on decreasing depression level was noted. The TES treatment is not accompanied by side effects and has the limited sphere of contra-indications, moreover this method is profitable economically and accessible.

I. T. Riabtseva, K. I. Shapovalova

Substitute estrogen therapy at post-varicotomy

The efficiency of preparation Divigel was specified in this work (1 mg of estradiol hemihydrate) within 12 months of use in women with post-varicotomy syndrome. After 6 months all patients-women have demonstrated the trust reduction Cuperman index, FSG level in blood serum and E2 concentration increase. After 6 months the osseous lost inhibition was noted, after 12 months the osseous mass increase was detected.

Divigel therapy tells on positively on blood atherogenic profile.

A. S. Vishnevsky et al.

Comparative estimation of phytoestrogens and natural estrogens efficiency while using as substitute therapy in patients with climacteric syndrome

In comparative aspect the clinical efficiency of "natural" estrogen – 17 – Я – estradiol and phytoestrogens for elimination of climacteric syndrome and age hyperlipoidemia appearing was studied.

Climadinon can be considered as alternative classic substitute therapy preparation for the treatment of vasovegetal disorders within climacteric syndrome. The absence of side effects allows recommend this preparation on the first stage of patients treatment. Should the phytoestrogens effect became weaker, on the second hormonotherapy stage it is possible to obtain the disorders compensation by means of prescribing preparations, containing "natural" estrogens.

R. V. Pavlov, V. A. Aksionenko,
S. A. Selkov

Cytokines production by mononuclear cells, infiltrating the epithelium tumour of ovaries

At auto serum presence one investigated IL1 β , IL2, IL4, IL6 and TNF α production by mononuclear cells, infiltrating epithelium tumor of ovaries in 50 women of the patients by good-quality tumors, 30 patients by boundary tumors and 50 patients by an ovarian carcinoma.

It was established, that IL1 β , TNF α and IL6 production by mononuclear cells, infiltrating epithelium tumour of ovary, grew at malignancy of good-quality tumors and decreased the differentiation degree of cells of ovarian carcinoma. At malignancy of good-quality tumours and decreasing differentiation degree of cells of ovarian carcinoma the decrease of spontaneous and stimulated production of IL2 and stimulated production of IL4 by mononuclear cells, infiltrating epithelium tumour of ovary is revealed.

The received data allow approving the increase of activity of mononuclear fagocytes, infiltrating epithelium tumor of ovarian during tumour progression, and also the decrease of T-cells activity in the 1-st and 2 types of immunity reactions in tumours of this localization.

One of the possible reasons of cell's immunity decrease at a tissue level in ovarian tumour can be increased production of cytokines by mononuclears, closing immunity reactions, in particular IL6.

L. M. Kappusheva, B. I. Bansova,
J. A. Golova

Importance of transcervical myomectomy in pre- & postmenopausal patients.

Evaluation of the importance of hysteroscopic transcervical myomectomy in pre- & postmenopausal patients with submucous myoma.

Mechanical myomectomy was performed mostly in patients with submucous myoma of 0 type, as a single-moment operation, but with a short hospital stay. Electrosurgical myomectomy was preferable in patients with submucous myoma with greater intramural component, smaller in size, localized in difficult to reach areas, where the mechanical technique was impossible. 71,1% of the patients after transcervical myomectomy had positive clinical effect concerning uterine bleeding, and 94,7% of the patients enrolled in the study, could escape the hysterectomy.

E. P. Shatunova

Diagnostic screening character of adnexa inflammatory formations

Cytological and biochemical investigations of adnexa exudation in 120 patients with chronic purulent and in 80 patients with cute serum form of adnexa inflammation. It was established, that pathological types of cytograms and protein metabolism alteration correspond to the inflammatory adnexa process. The performed analysis reflects depth destruct changing and permits to detect peculiarities, inherent in inflammatory process different forms.

Neuroendocrinal disturbances of menstrual cycle

K. V. Shalepo, E. V. Shinityna,
A. N. Savitsheva, M. Domeika

Chlamydia trachomatis detection in different urogenital samples

Contemporary concepts concerning etiology, pathogenesis and therapy principles of neuroendocrinal disturbances are reflected in this lecture.

The results of Chlamydia trachomatis detection in different urogenital samples (vagina, cervix, urethra, urine) are presented in this report. The study was carried out for the period of 1999 to 2000. A total of 397 women and 253 men were examined. Cervical, urethral and vaginal swabs from women, and urethral, first voided urine (FVU) specimens from men were tested.

For diagnosis of Chlamydia, trachomatis the following methods were used: polymerase chain reaction (PCR), direct immunofluorescence test (DIF) and cell culture (CC). In male samples, more often chlamydiae were detected in the urethra (11.6%), more rarely – in the FVU (6%). When female samples were tested, more often C.trachomatis was found in the vagina (18.4%), and less often – in the cervix (14.4) and the urethra (8.8%).

The sensitivity and specificity of the methods used to test urogenital samples were determined. The PCR sensitivity and specificity was shown to be 75 and 100% for C.trachomatis detection in the cervix, 75 and 97.5% - in the female urethra, and 63 and 99% - in the vagina, respectively. The PCR sensitivity and specificity was found to be 78 and 100% in the male urethral specimens and 100 and 99.6% in the FVU, respectively.

The sensitivity of cell culture method used for chlamydiae detection in cervical, female and male urethral samples was low – 33.9, 47.1 and 50% respectively. The CC specificity was 100%.

E. V. Shipitsina, A. M. Savitsheva,
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M. Domeika

Pooling Endocervical Samples for Chlamydia trachomatis Diagnosis by Polymerase Chain Reaction: Cost Saving Strategy for Epidemiological and Screening Studies

The technique of pooling endocervical samples for PCR detection of C.trachomatis was developed and compared with individual testing. The efficiency of pooling strategy was evaluated for its accuracy and cost saving ability. Population prevalence based on pooled data was estimated. 1.500 endocervical samples were tested individually and pooled by 5 (300 pools) and 10 (150 pools) specimens. The sensitivity and specificity of PCR was not affected by pooling either by 5 or by 10 samples. The estimated prevalence was 6.1% (95% CI: 4.5-7.7) and 6.0% (95% CI: 4.3-7.7) for pooling by 5 and 10, respectively. The prevalence of 6.6% determined by individual testing (99 of 1.500) was within 95% CI of the estimated prevalence for pooling by 5 and 10. The used pooling strategy has resulted in 53.3 and 44.0% cost savings, when endocervical samples were pooled by 5 and 10, respectively. Thus, pooling endocervical samples for detection of C.trachomatis is an accurate and cost saving approach for realization of large-scale studies.

V. P. Baskakov, J. V. Tseliov,
N. N. Ruchliada

Problem of the contemporary diagnostics of womb adenomyosis

This article is dedicated to the review of contemporary methods of womb adenomyosis.

Authors have performed the analysis of literature data about diagnostic informationness of various histological verification disease methods and have determined main tendencies of these methods improvement, have discussed perspectives.

J. V. Tseliov, V. G. Abashin

What we know about the first learned midwives of Russia?

"It's not unknown how many evil consequences for those giving birth in the absence of scientists and skillful attendants occur every day?, and it often happens that these poor women in labor are in their torment, and even sinless babies, for the same grandmothers called art, are not only for life with injury to one or the other remain, but life itself is prematurely deprived ..."

P.Z.Kondoidi, 1754