

Fetal pathology was represented by IUGR (20.47%) and premature birth (11.81%). The health condition of new borns, expressed by Apgar index was very good in most of the cases (IA=10: 8.66%, IA=9: 71.26%, IA=8: 14.96%, IA=7: 3.94%, IA=6: 1.18%). The favorable evolution of the fetuses was due to the early diagnosis established and the properly treatment administrated.

We had no fetal death in the group of diagnosed and treated thrombophilia patients, as well as no other thrombotic complication.

As a conclusion, we think that there are several important issues that should be taken into account when managing a pregnant thrombophilic woman. It is of a great importance:

- To think that pregnancy is a state of acquired hypercoagulability, and that a women hiding a trombophilia may present with clinical symptoms for the first time during gestation or the puerperium – so think THROMBOPHILIA
- To correctly select the patients for thrombophilia testing
- To choose the correct moment for testing
- To provide thromboprophylaxis before the occurrence of any obstetrical complication mentioned above.
- To judge correctly especially during the second half of pregnancy the ultrasonic appearance of the placenta, the growth curves of the fetus and the placental circulation, elements that can modulate the management of that pregnancy (modifying the dosage of anticoagulant, establishing the right time for delivery).



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DE-INSTALLATION OF THE MULTI-ORGANIC DYSFUNCTION SYNDROME BY ASSOCIATING THE MITOCHONDRIAL MICROCIRCULATORY RECRUITMENT WITH MULTIPLE ORGAN SUPPORT THERAPY IN EXTRACORPOREAL LIFE SUPPORT ORGANIZATION

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Key words: microcirculatory - mitochondrial distress syndrome (MMDs); microcirculatory - mitochondrial recruitment; multi-organ support therapy (MOST); extracorporeal life support organization (ELSO); hypo - (an) - ergic mitochondria; mitochondrial energy collapse; lysosomal clearance (mitophagia); mitochondrial permeability transition pore; canal uniporte - Ca⁺⁺; the marker of tissue hypoxia, pCO₂; systemic perfusion pressure; mean blood pressure; capillary resistance; extravascular lung water index (EVLWI); thoracic epidural block; alveolar recruitment; microcirculation; macro-circulation; pulmonary distress syndrome (ARD_s); area metabolic capillary - cell; syndrome of multi-organic acute dysfunction (MODS).

Introduction: The installation of macro - circulation centralization in MODS triggering in critical obstetric states caused by intravascular coagulation, HELLP, shock, SIRS, septicemia, CARS, embolism of the pulmonary artery, cerebral and other, – microcirculation will also be seriously damaged, as the reduction in blood flow perfusion affects the venous return to eliminate the waste of cellular metabolism, where a marker of tissue hypoxia is the increase in carbon dioxide.

Objective: The mitochondrial microcirculatory recruitment with multiple organ support therapy in extracorporeal life support.

Material and methods: This is a retrospective study over 35 years, in a lot of critical situations in obstetrics.

Results: This disorder generates microcirculatory - mitochondrial distress syndrome, mitochondrial energy collapse, which can be recovered by microcirculation – mitochondrial recruitment to optimize systemic perfusion pressure (SPP), in turn dependent on mean blood pressure and capillary resistance. Microcirculation - mitochondrial recruitment decentralizes macro circulation benefits microcirculation in the capillary-cell metabolic area.

In cases of manifestation respiratory-pulmonary CO₂ ↑ (ARD_s), confirmed ↓ PaO₂/FiO₂ ↓300 to Acute Respiratory Distress Syndrome (Berlin definition, 2012), thus also aggravates the microcirculatory-mitochondrial distress syndrome, mitochondrial collapse and the recruitment of the microcirculatory-mitochondrial is supplemented with multi-organ support therapy (MOST). 1. Alveolar recruitment through respiratory support in specific ventilation modes, predominantly APRV, with permissive hypercapnia at a normal pH. 2) MOST - extracorporeal with technical support. Extracorporeal Life Support Organization – ELSO. 3) Modeling of extra - vascular pulmonary fluid; 4) Th₄ - Th₅ thoracic epidural block.

Conclusion: The absence of decreasing of the pCO₂ tissue hypoxia marker at the A-V difference after microcirculatory - mitochondrial recruitment, rejects the necrosis / apoptosis, cellular hypo- (an) ergic and proves the mitochondrial eu-energetic metabolic remodeling with the elimination of the hypo (an) ergic mitochondria performed by clearance lysosomal (mitophagy), thus demonstrating eu-ergic mitochondria with the normalization of mitochondrial uniporter-Ca⁺⁺ and mitochondrial permeability pore transition, which productively inactivate the toxic forms of oxygen and nitrogen.

REZUMAT

Instalarea centralizării macro - circulației în declanșarea MODS în stări critice de obstetrică cauzate de coagularea intravasculară, HELLP, șoc, SIRS, septicemie, CARS, embolie a arterei pulmonare, cerebrală și altele; - microcirculația va fi de asemenea grav afectată, iar perfuzia fluxului sanguin afectează revenirea venoasă pentru a elimina deșeurile de metabolism celular, unde un marker al hipoxiei tisulare este creșterea dioxidului de carbon, la diferența A-V. Această tulburare generează sindromul detresei microcirculator - mitocondriale (MMDs), colapsul energetic mitocondrial, care poate fi de-instalat (recuperat) prin recrutarea microcirculator - mitocondrială odată cu optimizarea presiunii de perfuzie sistemică, în dependență de tensiunea arterială medie și rezistența capilară. Recrutarea microcirculator - mitocondrială descentralizează macrocirculația și ameliorează microcirculația în spațiul metabolic capilar - celulă. În cazurile de manifestare a ↑CO₂-dependent respirator-pulmonar, confirmat ↓ PaO₂ / FiO₂ ↓ 300 pentru ARDS, sindromul de detresă respiratorie acută (definiția de la Berlin, 2012), agravează de asemenea, și sindromul detresei microcirculator-mitocondriale, colapsul mitocondrial iar recrutarea microcirculator - mitocondrială este suplimentată cu terapia de sprijin multi-organ (MOST). 1. Recrutarea alveolară prin suport respirator în moduri de ventilație specifice preponderent APRV, cu hipercapnie permisivă la un pH normal. 2) MOST - extracorporeal cu suport tehnic în managementul vital prin sprijin extracorporeal - ELSO. 3) modelarea fluidului pulmonar extra-vascular; 4) Blocul epidural T4-Th5 toracic.

Reducerea markerului hipoxiei tisulare pCO₂ la diferența A-V după recuperarea microcirculator - mitocondrială, respinge necroza / apoptoza, hypo- (an) ergicul celular și dovedește remodelarea metabolică eu-energetică mitocondrială prin eliminarea hypo (an) mitocondriilor ergice efectuate prin clearance-ul lizozomal (mitofagie), demonstrând astfel mitocondriile eu-ergice cu normalizarea tranziției porilor permeabilității mitocondriale și canalului uniporter-Ca⁺⁺, care inactivează productiv formele toxice de oxigen și azot.



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HORMONE REPLACEMENT THERAPY USED FOR CORRECTION OF MENSTRUAL DYSFUNCTION ASSOCIATED WITH LIVER PATHOLOGY

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The problem of viral hepatitis and menstrual dysfunctions stays present, being determined by the high incidence and severity of physiopathological abnormalities, specific to these associations. In Republic of Moldova 9% of population are chronic carriers of HVB, HVC affects 1.5-5% of population.

The purpose of this work was to study the therapeutic effect of hormone therapy in women with menstrual dysfunctions caused by chronic viral hepatitis.

Materials and methods: The controlled randomized study evaluated the treatment results of 80 patients with menstrual dysfunctions in association with liver pathology, randomly picked out from 319 women suffering from chronic viral hepatitis. The selection of the hormonal therapy was made depending on the menstrual irregularities, hormonal profile and results of the genitals sonography:

- 1st group (26 patients) – hepatoprotectors,
- 2nd group (23 patients) – Drogesteron 10 mg (Duphaston) + hepatoprotectors,
- 3rd group (31 patients) – Etradiol 2mg + Drogesteron 10 mg (Femoston) + hepatoprotectors. The control group included 15 healthy women of reproductive age with normal menstrual cycle.

Results: The examined patient's age varied between 18 and 40 years, mean age - 26.0±5 years. Bilirubin level in patients with HVB was 3 times higher compared with control group, but in mix-hepatitis -10 times. Transaminases were elevated 10-40 times, especially in mixed viral hepatitis. Alkaline phosphatase (27.81 ± 1.3 UI/l), prothrombin, total protein, and albumin were considerably decreased. Similar changes have been observed in **cholesterol level (dropped till 2.60±0.21 mmol/l) and β-lipoprotein (195.0 ± 25.3 Un)**, which are evidently decreased in all patients with all types of viral hepatitis. Regular menstrual cycle was present only in 7.5 ± 2.48.