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CONDITION OF THE COAGULATION SYSTEM IN INTRAHEPATIC CHOLESTASIS IN PREGNANCY

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Summary: Intrahepatic cholestasis of pregnancy women, over the last 5 years (2019-2023), occurred in 112 women. In 10 (11.2%) pregnant women, DIC syndrome manifested itself as uterine bleeding and bruising. Against the background of severe detachment of a normally located placenta, 7 (6.2%) had labor completed by caesarean section. Due to the timely treatment of hemorrhagic syndrome using counterkal, plasma and plasma, maternal mortality was not observed, and perinatal mortality was2(17.8 ‰).

Summary: Intrahepatic cholestasis of pregnant women occurred in 112 women over the past 5 years (2019-2023). In 10 (11.2%) pregnant women, DIC syndrome manifested itself as uterine bleeding and bruising. Against the background of severe abruption of a normally located placenta, in 7 (6.2%) the birth ended by cesarean section. Thanks to timely treatment of hemorrhagic syndrome with the use of contrical and plasma, maternal mortality was not observed, and perinatal mortality was 2 (17.8 ‰).

Khulosa: Homiladorlikning jigar ichi cholestazi kasalligi bilan keyingi 5 yil (2019-2023) davomida 112 ayol bemor kuzatilgan. Shu homiladorlardan 10(11.2%) tasida, hemorrhagic syndrome bachadon kon ketishi va teri mўmtoloq bўlishi holatlari kuzatilingan. 7(6.2%) aelda khomila yўldoshning vaktidan oldin kўchishi oғir darazhasi tufayli, tuғruk zharayoni kesar kirkish amaliyoti bilan tugallangan. Oz vaktida kontrikal, plasma va hemotran qullash natijasida hemorrhagic syndrome davolanib, onalar ulimi holati kuzatilmagan va perinatal ulim esa 2 (17.8 ‰) tashkil kilgan.

Keywords: Intrahepatic cholestasis of pregnancy, DIC syndrome, placental abruption, infusion-transfusion therapy, total hysterectomy.

Relevance. Intrahepatic cholestasis of pregnancy (ICP) is the second most common cause of jaundice in pregnant women after viral hepatitis, which accounts for up to 20-25% of its cases. ICP can be accompanied by serious obstetric complications for both mother and fetus. The incidence of premature birth increases, reaching from 20% to 60%, the possibility of severe bleeding during childbirth and infectious complications in the postpartum period (1,3,6,8). The prognosis for the fetus is more serious and is characterized by high perinatal mortality, ranging from 1.5% to 35%, an increasing incidence of prematurity, fetal growth retardation and distress syndrome up to 35% (2,5,9).

Elevated levels of gestational hormones and genetic predisposition are important factors in the development of ICP. In addition, mutation of hepatobiliary transport proteins is of great importance in the development of this pathology (4.11).

DIC syndrome mainly manifests itself in the severe stage of RCHD, often after intrauterine fetal death. Tissue thromboplastin, bacterial endo- and exotoxins, hemolyzed erythrocytes, proteolytic

enzymes, antigen-antibody complexes, hypoxia, free fatty acids, acidosis, contribute to the development of DIC syndrome in pregnant women with cholestatic hepatosis(3,7,12).

Purpose of the study– to identify changes in the state of the coagulation system in intrahepatic cholestasis of pregnant women.

Materials and methods

Under our supervision there were 112 pregnant women withVCB in the maternity complex in Khiva and the Urgench district of the Khorezm region, where material was collected in the period from 2019-2023. All pregnant women underwent laboratory tests: total bilirubin with fractions, ALT, AST, total protein, urea, creatinine, blood glucose, cholesterol, triglycerides, β-lipoproteins, thymol test, alkaline phosphatase).

Laboratory diagnosis of DIC syndrome is based on identifying signs of consumption of platelets and plasma coagulation factors, PTI, plasma recalcification time, APTT, plasma tolerance to heparin, thrombotest, platelet count and fibrinogen.

Results and discussion.

A decrease in the concentration of components of the blood coagulation system occurs when blood loss is > 50% of the bcc, which leads to depletion of the hemostasis system, the development of disseminated intravascular coagulation syndrome, hemorrhagic shock, and aggravation of the condition of the postpartum woman. Of 112 pregnant women, 10 (11.2%) developed DIC - a syndrome withhemorrhagic manifestations; skin petechial hemorrhages, profuse bleeding from the uterus. The platelet count in the blood decreased to 174.0 ± 10.7 thousand, fibrinogen A up to 1.9 ± 0.7 g/l, APTT 120.8 ± 13.0 sec., recalcification time 166.5± 13.6, plasma tolerance to heparin 284.5± 21.8 sec., thrombotest decreased by an average of 3.0± 0.1st, Lee-White clotting time 13.3 ± 0.8 sec. and PTI up to 64.8 ± 2.4%, with a shift in the coagulogram in side of hypocoagulation. Total bilirubin in the blood quickly increased from 42.2 - 62.4 μ/mol/l, and averaged 52.2 + 2.1 μ/mol/l, and the indicators of direct and indirect bilirubin were changed: direct 34 .1+1.1 μ/mol/l and indirect – 18.1+1.1 μ/mol/l. Enzymes increased slightly AlAT averaged 1.95 +0.50 and AST 1.1 + 0.24 m/mol/l ($P<0.03$).

In 7 (6.2%) patients, at 36-39 weeks of pregnancy, severe abruption of the normally located placenta occurred, for which a caesarean section was performed. In 1 (0.8%) pregnant woman, during surgery against the background of DIC, bleeding progressed to 2100.0±50.0 ($P<0.05$) and therefore the scope of the operation was expanded to hysterectomy. In the remaining 105 (93.7%) cases, obstetric tactics consisted of prolonging pregnancy to gestational maturity.

For the treatment of DIC syndrome in the hypocoagulation stage, fresh frozen plasma was used 20 ml/kg/body weight, protease inhibitors - contrical up to 250 thousand. All 10 (11.2%) patients with DIC syndrome received full infusion therapy with administration of up to 15 mg/kg body weight of tranexamic acid (hemotran), repeating every 6-8 hours until complete hemostasis. Tranexamic acid (hemotran) is a synthetic amino acid that competitively inhibits plasminogen; its effectiveness is 15-20 times higher than aminocaproic acid. The action of tranexamic acid is due to the inhibition of lysine-binding sites of plasminogen, due to which this proenzyme is not converted into plasmin and cannot contact fibrin. Also, tranexamic acid (hemotran) suppresses the production of kinins and other active peptides, which provides the antiallergic and anti-inflammatory effect of this drug (10). BCC replenishment was carried out with crystalloids and colloids. Before the introduction of plasma or together with it, up to 1000 units were

administered intravenously. heparin for every 300-500 ml of plasma. In case of very large blood loss (decrease in hematocrit - below 23%, hemoglobin - below 80 g/l, volume of lost blood - more than 35% of the bcc), along with plasma, 18-20 ml/kg/body weight of e.m. mass was administered intravenously. When discussing blood transfusion, it should be noted that transfusion of erythrocyte-containing blood components helps restore globular volume in MAC. Recently, a major positive role has been played by the procedure of hardware intraoperative reinfusion of autoerythrocytes, which allows minimizing the use of donor erythrocytes, and in some cases completely eliminating them, preventing possible blood transfusion complications and improving the outcome of surgery in case of massive obstetric hemorrhage. There was no maternal mortality in the study group, but perinatal mortality was 2 (17.8 ‰).

Conclusions:

1. The study showed that ICP is a rather dangerous complication of pregnancy, accompanied by high perinatal mortality of up to 2 (17.8 ‰).
2. In 10 (11.2%) patients with ICP, clinical hemorrhagic syndrome was encountered, and with the selection of rational therapy and obstetric tactics, maternal mortality can be avoided.
3. In 7 (6.2%) of 112 pregnant women, at 36-39 weeks of pregnancy, abruption of the normally located placenta occurred and the birth ended with a cesarean section, and in 1 (0.8%) pregnant woman, due to severe hemorrhagic syndrome, the scope of the operation was expanded before hysterectomy.

Bibliography:

1. Bik-Mukhametova Ya. I., Zakharenkova T. N., Intrahepatic cholestasis of pregnant women with unfavorable perinatal outcome. Magazine. Health and environmental problems. 2019 pp. 1-4
2. Ivashkin V.T., Shirokova E.N., Maevskaya M.V., Pavlov Ch.S., Shifrin O.S., Maev I.V., et al. Clinical recommendations of the Russian Gastroenterological Association and the Russian Society for the Study of the Liver for the diagnosis and treatment of cholestasis. Russian Journal of Gastroenterology, Hepatology, Coloproctology. 2015; 25(2): 41 - 57.
3. Kosheleva O. V., Kachkovsky M. A. // Clinical diagnosis of cholestatic hepatosis in pregnant women. Zhur. Bulletin of Medicine Institute "REAVIZ".-2018.- No. 1.-P.143-147
4. Ministry of Health of the Russian Federation. Clinical guidelines “Intrahepatic cholestasis during pregnancy.” 2019.P.62
5. Uspenskaya Yu.B., “Features of the clinic, diagnosis and treatment of diseases of the hepatobiliary system during pregnancy” Abstract of the doctoral dissertation. Moscow. 2019
6. Batsry L, Zloto K, Kalter A, Baum M, Mazaki-Tovi S, Yinon Y. Perinatal outcomes of intrahepatic cholestasis of pregnancy in twin versus singleton pregnancies: is plurality associated with adverse outcomes? Arch. Gynecol. Obstet. 2019 Oct;300(4):881-887. [PubMed]
7. Bull LN, Thompson RJ. Progressive Familial Intrahepatic Cholestasis. Clin Liver Dis. 2018 Nov;22(4):657-669.
8. Chappell LC, Bell JL, Smith A, Linsell L, Juszczak E, Dixon PH, et al. Ursodeoxycholic acid versus placebo in women with intrahepatic cholestasis of pregnancy (PITCHES): a randomized controlled trial. Lancet (London, England). 2019; 394(10201): 849 - 60.

9. Chappell LC, Chambers J., Thornton JG, Williamson C. Does ursodeoxycholic acid improve perinatal outcomes in women with intrahepatic cholestasis of pregnancy? BMJ. 2018; 360:k104.
10. Geenes V, Chappell LC, Seed PT, Steer PJ, Knight M, Williamson C. Association of severe intrahepatic cholestasis of pregnancy with adverse pregnancy outcomes: A prospective population - based case - control study. Hepatology. 2014 Apr. 59(4):1482 - 91.
11. Maddali MM, Rajakumar MC Tranexamic Acid and primary coronary artery bypass surgery: a prospective study. Asian Cardiovasc Thorac Ann. 2007; 15 (4): 313-9. Buch AC, Patil A, Haldar N et all. Relation of Lymfocytesubsetsand cytokines in different grades of alcoholic cirrhosis. // J. of clinical and clinical. 2019 – Vol. 13(1). – P. 8-11.
12. Review Intrahepatic Cholestasis in Pregnancy: Review of the Literature Joanna Piechota 1 and Wojciech Jelski 2,* 1 2nd Department of Obstetrics and Gynecology, Medical University of Warsaw, 00-315 Warsaw, Poland; Published: May 6, 2020