THE USE OF MEDICAL OZONE IN THE INTEGRATED TREATMENT OF FETOPLACENTAL INSUFFICIENCY IN WOMEN WITH COVID-19

Nishonova Dilorom Axmatjanovna

Nadjmitdinova Dilbarxon Abdullajon kizi

Andijan state medical institute

Annotation

Coronavirus infection (COVID-19) is an infectious disease caused by the SARS-CoV-2 virus. Pregnancy is a physiological condition in which women are more susceptible to respiratory diseases viral infections due to physiological changes in the immune and cardiopulmonary systems and constitute a risk group on severe respiratory viral infections.

Key words: Coronavirus infection, ozone therapy, fetoplacental insufficiency.

ПРИМЕНЕНИЕ МЕДИЦИНСКОГО ОЗОНА В КОМПЛЕКСНОМ ЛЕЧЕНИИ ФЕТОПЛАЦЕНТАРНОЙ НЕДОСТАТОЧНОСТИ У ЖЕНЩИН С COVID-19

Нишонова Дилором Ахматжановна

Наджмитдинова Дилбархон Абдуллажон кизи

Андижанский государственный медицинский институт

Аннотация. Коронавирусная инфекция (COVID-19) – инфекционное заболевание, вызываемое вирусом SARS-CoV-2. Беременность – физиологическое состояние, при котором женщины более восприимчивы к заболеваниям органов дыхания вирусными инфекциями вследствие физиологических изменений в иммунной и сердечно-легочной системах и составляют группу риска по тяжелым респираторным вирусным инфекциям.

Ключевые слова: Коронавирусная инфекция, озонотерапия, фетоплацентарная недостаточность.

Prevention and treatment of chronic placental insufficiency remains one of the priorities of modern obstetrics. The importance of the problem is related to the increase in complications of the pregnancy process, and the development of this syndrome leads to an increase in perinatal morbidity and mortality. In clinical practice, chronic placental insufficiency occurs in every third pregnant group with a high risk of perinatal pathology, as part of the causes of perinatal death in 30-100% of cases, it aggravates the course of pregnancy with extragenital pathology and obstetric complications. The use of medical ozone in the complex for the treatment of placental insufficiency of medical ozone with multifactorial non-specific effects is considered promising. According to clinical and experimental studies, ozone therapy stimulates the hormone-producing function of the fetoplacental complex, enhances the activity of immunocompetent cells, improves blood rheology and oxygen transport function, antioxidant protection, increases arterial oxygen tension, and activates the body's enzyme systems. . The effect of ozone therapy on nitric oxide exchange in the maternal-placental-fetus system in hypertensive pregnant women was

studied.
However, in the literature available to us, there is no information about the role of nitric oxide in the development of FPI in women with infectious-inflammatory etiology and the possibility of using medical ozone in the treatment of this contingent.
Fundamental biochemical, immunological, morphological, ultrastructural, physiological studies and clinical trials of parenteral use of ozonized solutions indicate high efficiency in activating the microsomal system of the liver, optimizing the antioxidant activity of the body. Thus, it becomes possible to use ozone in clinical toxicology in the toxicogenic and somatogenic stages, as a powerful antihypoxic and antioxidant agent.
Ozone (Oz) is an allotropic form of oxygen, a gas with a pungent characteristic odor. Ozone is a much stronger oxidizing agent than oxygen. In this regard, ozone oxidizes many substances that are inert to oxygen under normal conditions. Characteristic products of a number of chemical reactions of ozone are ozonides, which are formed during the reaction of ozone with C=C bonds. Numerous studies have shown that therapeutic doses of ozone stimulate the antioxidant system and reduce the intensity of lipid peroxidation (LPO). In the process of ozone therapy, the initial activation of free radical oxidation under the influence of ozone therapy naturally occurs, since ozone, oxygen and free radicals are introduced into the body, but at the same time, the antioxidant system (AOS) is quickly launched, which ozone indirectly stimulates. Regulation of LPO and AOS processes in the body, apparently, is one of the mechanisms of the therapeutic effect of ozone therapy. At the same time, many authors consider LPO activation to be one of the universal pathogenetic factors in various diseases. The pathogenetic expediency of using medical ozone (correcting uteroplacental-fetal blood flow, improving hemorheological properties of blood, immune and biochemical parameters of homeostasis of a pregnant woman) fully extends to the newborn, whose adaptive capabilities increase significantly.

The purpose of the study: Study of the effectiveness of using medical ozone in the FPY prevention complex in pregnant women infected with Covid-19.
Research tasks: To study the effect of medical ozone on indicators of nitrogen exchange in the maternal-placental-fetus system in pregnant women infected with Covid-19 and to evaluate its effectiveness.
To determine the results of pregnancy and childbirth, the condition of pregnant women and newborns who received complex therapy from Covid-19 in a place equipped with ozone therapy.

Changes in hematological, immunological, biochemical, microbiological and instrumental research methods were evaluated. It is known that the activation of the nitrate reductase enzyme in the L-arginine-nitric oxide system due to increased production of nitric oxide and disruption of nitric oxide metabolism may be one of the reasons for the development of fetoplacental insufficiency in pregnant women. The use of ozone therapy for the treatment of FPY in this group of women who underwent Covid-19 has been approved.
Practical significance: The ozone therapy method is being introduced into clinical practice in the complex for the treatment and prevention of fetoplacental insufficiency in pregnant women infected with Covid-19. The use of ozone therapy in pregnant women who have passed Covid-19 allows to significantly improve clinical and laboratory indicators, the condition of organs and systems, which helps to prolong pregnancy, reduce the frequency of pregnancy complications, for the fetus and the newborn. provides a more favorable prognosis.

Conclusion

Thus, FPI largely determines the condition of the newborn, increasing the frequency of various complications, mainly associated with insufficient supply of oxygen and nutrients to the fetus through the placenta. At the same time, the use of medical ozone as part of the complex therapy of FPI helps to reduce the severity of such manifestations, bringing it closer to the average population.

Literature

1. Voloshchuk I.N. Morphological bases and pathogenesis of placental insufficiency: dis. ... dr. honey. Sciences. Moscow, 2022. 298 p.

2. Khachaturova M.D., Fedorovich O.K., Novikova V.A. and other Features of the treatment of placental insufficiency in violations of the fetal-placental blood flow / Proceedings of the IX Russian Forum "Mother and Child". Moscow. 2017. S. 279-280.

3.Barry J.S., Rozance P.J., Anthony R.V. An animal model of placental insufficiency-induced intrauterine growth restriction. Semin Perinatol. 2018. Vol. 32. № 3. P. 225-230.

4. Black L.V., Maheshwari A. Disorders of the fetomaternal unit: hematologic manifestations in the fetus and neonate. Semin Perinatol. 2019. Vol. 33. № 1. P. 12-19.

5. Ergaz Z., Avgil M., Ornoy A. Intrauterine growth restriction-etiology and consequences: what do we know about the human situation and experimental animal models. Reprod Toxicol. 2020. Vol. 20. № 3. P. 301-322.

6. Glukhovets B.I., Rets lu.V. Fetal compensatory and abnormal reactions in fetoplacental insufficiency. Arkh Patol. 2018. Vol. 70. № 2. P. 59-62.

7. Bernstein DI, Bellamy AR, Hook EW et al. Epidemiology, clinical presentationand antibody response to primary infection with herpes simplex virus type 1 and type 2 in young women 35:599. 2020.

8. Xu F, Sternberg MR, Kottiri BJ et al. Trends in herpes simplex virus type 1 and type 2 seroprevalence in the United States. JAMA 2006; 296: 9644. Workowski KA, Bolan GA, Centers for Disease Control and Prevention. Sexually transmitted diseases treatment guidelines, 2015. MMWR Re-comm Rep 2020; 64:1