Optimization of management tactics of women with fetal loss syndrome against the background of thrombophilia

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Abstract
The article shows the results of the study of 82 pregnant women with fetal loss syndrome on the background of thrombophilia. The necessity of prevention of gestational complications in women with thrombophilia performing the preconception preparation and therapeutic-preventive measures during pregnancy using such medicines as sulodexide and tivortin aspartate is substantiated.

Keywords: Fetal loss syndrome, thrombophilia, gestational complications, prevention, sulodexide, tivortin aspartate

1. Introduction
In modern obstetrics special attention is focused on the planning and preparation for pregnancy in women with fetal loss syndrome, the frequency of which is quite high, ranging from 10% to 25% [1, 2].
Fetal loss syndrome on the background of thrombophilia develops due to a violation of immunological tolerance, activation of the complement system, synthesis of antiphospholipid and antiphospholipid-cofactor antibodies with the development of generalized endotheliopathy with the capture of microvascular bed of chorion/placenta from the early terms of pregnancy [3, 4].
It is known that the use of hormones increases blood clotting and violates liver function, which could impair the microcirculation and metabolism observed in women with fetal loss syndrome. Therefore, for the complex treatment of pregnant women one should include anticoagulants, hepatoprotectors and medicines that restore metabolic processes [2, 5].
The intensity of the blood flow between the vessels of uterus and placenta is largely supported by nitric oxide (NO), the effect of which is associated with vasodilation and inhibition process of platelet aggregation and adhesion [6]. Lack of NO leads to disruption of the microcirculation and promotes the development of hypoxic syndrome and placental insufficiency. Vasoconstriction of utero-placental complex blood vessels inhibits the production of NO and causes the appearance of the myometrium hypertonous. All this needs to include donors of NO, particularly tivortin aspartate for the comprehensive drug therapy in pregnancy loss [5, 6].
To correct thrombophilic changes of hemostaziogram in women with fetal loss syndrome antiaggregant agents and anticoagulants are used [2, 3, 4]. Medicine sulodexide has antithrombotic drug, anticoagulant, profibrinolytic and angioprotective action [7]. In addition, sulodexide normalizes blood rheology by reducing the level of triglycerides.
Approaches to the management of pregnancy in women with fetal loss syndrome on the background of thrombophilia remain debatable, due to the lack of knowledge about the etiology and pathogenesis of early termination of pregnancy. This indicates the need for further scientific research and improvement of medical diagnostic care for pregnant women with thrombophilia.
The aim of the work is to develop an algorithm of therapeutic-preventive measures for women with fetal loss syndrome on the background of thrombophilia.

2. Materials and methods of study
Under supervision there were 82 patients with the syndrome of fetal loss and thrombophilia. Comparison group consisted of 30 pregnant women with physiological pregnancy, which had no burdened obstetric anamnesis.
Pregnant women were examined using the general clinical and laboratory methods. Women with thrombophilia were divided into groups: I\textsuperscript{st} group – 42 women who received conventional treatment and preventive measures (antispasmodics, magnesium drugs, low molecular weight heparins, sedatives); II\textsuperscript{nd} group – 40 women who received our proposed method. According to the gynecological, obstetric and physical history, women of the I\textsuperscript{st} and II\textsuperscript{nd} groups did not differ.

The proposed algorithm of management of women with thrombophilia was in preconception preparation and performance of therapeutic-preventive measures during pregnancy. During confirmation of the diagnosis of thrombophilia while pregnancy planning there were administered: L-arginine aspartate in the second phase of the menstrual cycle orally, 1 volumetric spoon 3 times daily with meals for 14 days and antithrombotic agent sulodexide 250 LU 1 capsule twice a day orally for 3 months. In the occurrence of pregnancy the prevention of gestational and perinatal complications was performed using the medicine tivortin aspartate in gestational age of 6-8 and 11-13 weeks, 1 volumetric spoon 3 times daily with meals orally during 14 days.

3. Results and Discussion
The average age of women was 30.2±4.0 years in the I\textsuperscript{st} group and 28.1±3.0 years in the II\textsuperscript{nd} group.

During analysis of extragenital pathology in the groups of the studied women cardiovascular disease (35.4%), thromboembolic complications (30.0%), diseases of the gastrointestinal tract (28.0%), thyroid gland disease (11.0%) were most frequently observed. Combined extragenital pathology occurred in 46.7% of women.

Patients with thrombophilia were characterized by late menarche (16.1±1.8 years), high incidence of menstrual disorders (30.0% of women). In gynecological history there were observed inflammatory diseases of the pelvic organs (9.8%), diseases of the cervix (8.5%). Adverse perinatal outcomes in history were noted in all women with thrombophilia. For 18 (22.0%) patients it was the first episode of fetal loss, for 26 (31.7%) – the second episode. 16 (19.5%) patients had a history of three or more episodes of fetal loss. 40 women (48.8%) were marked an initial miscarriage.

Complications of pregnancy in women of the I\textsuperscript{st} group were: threat of miscarriage (53.3%), placental dysfunction (38.1%), preeclampsia (19.0%) and pregnant women anemia (30.0%). The received results indicate a lack of correction of fetoplacental complex disorders and metabolic processes in the application of generally accepted health care measures.

Application of the developed by us algorithm made it possible to reduce significantly the incidence of gestational and perinatal pathology in pregnant women with thrombophilia.

5. References