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REPRODUCTIVE HEALTH OF WOMEN WITH EARLY MISCARRIAGES IN ANAMNESIS ASSOCIATED WITH VAGINAL DYSBIOSIS

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The article deals with comparative analysis of investigation on the basis of clinical statistics taken from archival medical histories in women with miscarriages in anamnesis associated with vaginal dysbiosis. Disorders of reproductive health in women with early reproductive loss are mostly manifested and typical for women with recurrent incompetent pregnancy. It is offered to use clinical markers as possible predictors of incompetent pregnancy.

Key words: pregnancy, reproductive, health, incompetent pregnancy.

Reproductive health and fertility function in conditions of unfavorable demographic situation both as individual and in the whole population are vital problems of modern obstetrics.

Deviation of reproductive function in women affects not only the birth rate but also contributes in increasing of obstetric and perinatal pathologies [1, 6].

The state of dynamic equilibrium between the pregnant body, her microbiocenosis and the environment can be considered as the optimal conditions of the course of gestational process [3–5].

The problem of miscarriage is 15–20 % of all desired pregnancies, and moreover, 75–80 % of them occur before 12 weeks [8]. One of the reasons for early pregnancy loss is infectious factor including vaginal dysbiosis [7]. In vaginal dysbiosis, abnormal vaginal microflora is able to get into uterine cavity through the cervical canal reaching the lower pole of the fertilized ovum to infect it. If it happens in early terms (25–35) weeks, pregnancy ends with early premature delivery based on the background of rupture of amniotic fluid sac [6].

However, the determination of risk factors in predicting early pregnancy loss and choosing individual approach to prevent miscarriage are still burning issues.

The purpose of investigation is to estimate peculiarities of reproductive health in women with spontaneous and recurrent miscarriage on the background of microbiocenosis of the vagina.

Methods of Examination. To specify the role of infectious agent, in a particular dysbiosis in genesis with spontaneous and recurrent miscarriage there were selected two representative groups.

The First Group consists of 100 patients with spontaneous abortion and the Second Group consists of 100 patients with recurrent miscarriage in anamnesis.

The Control Group also consisted of 100 women with physiological pregnancy, labor and normal biocenosis of vagina.

These groups of patients with early pregnancy loss were treated according to the clinical protocol in obstetrical care "Incompetent Pregnancy" (the order of Ministry of Health: November 3rd, 2008 #624). They were compared with each other and the Control Group.

All the women with early loss, in anamnesis were examined at the moment, them reaching the first trimester (6–12 weeks) or on admission to hospital.

Data processing was carried out by means of mathematical statistical analysis by statistical package "Statistica 7,0".

Results and discussion. It is established that the average age for women with early pregnancy loss in anamnesis were not significantly different. The average age was as follows in the First Group – (24,6 ± 2,3) years, in the Second Group – (25.7 ± 2.1) years, in the Control Group – (24.3 ± 2.6) years.

Analysis of age features among the women with early pregnancy loss in anamnesis is associated with vaginal dysbiosis shows that pregnant women were mainly at the age from 26 to 30. But in the Control Group we observe an increasing of miscarriage in pregnancy before the age of 26.

Analyzing the medical histories we notice high incidence of colds in childhood both in the First Group and in the Second Group (30 % and 29 %) against 18 % in the Control Group. The largest percentage, is rubella (48 % and 47 %) and measles – (25 % and 26 %); while virus hepatitis and epidemic parotitis were accounted much less (8 % and 9 %) and (4 % and 6 %) in accordance.

It should be noted, that high frequency of TORCH infection was found in the group of women with early pregnancy loss in anamnesis associated with dysbiosis of the vagina.

Every fifth patient from the First Group and the Second Group had infections of the respiratory tract and urinary tract. High percentage of women suffered from angina (48 % and 49 %) and acute respiratory viral infections (37 % and 41 %). This is a strong evidence of adaptive capacity in reduction of all systems which provide immune resistance.

In addition to infectious diseases, the majority of examined patients in the First Group and the Second Group suffered from extra-genital pathologies such as: pathology of the thyroid (47 % and 53 %); neuro circulatory dystonia (22 % and 24 %); urinary tract diseases (25 % and 31 %) gastrointestinal tract (21 % and 25 %) and pathology of the hepatobiliary system (20 % and 23 %), where chronic cholecystitis prevailed (15 % and 14 %). High percentage of anemia is also typical for women with early pregnancy loss in anamnesis.

Concomitant genital pathology is important for the course of gestation process. Among genital pathology there prevailed (dominated), chronic adnexitis, (56 % and 63 %), endometritis (18 % and 21 %), colitis (40 % and 42 %) endocervicitis (29 % and 30 %), cervical erosion (27 % and 36 %) which are trigger factors in miscarriages and premature deliveries [1].

Data on physical development, menstrual and reproductive functions are also noteworthy.

It was proved that almost all the tested women had typically feminile phenotypes. Height mass ratio were normal in 36 % of women with spontaneous abortions and

21 % in women with recurrent incompetent pregnancies, whereas in the Control Group it was 85 % ($P < 0,05$).

Among pregnant women with spontaneous abortions and recurrent incompetent pregnancies there were observed both abdominal type of obesity and shortage of body weight; they were significantly different from the Control Group ($P < 0,005$).

The study states that, menstruation began later in women with "syndrome of early pregnancy loss" than in women from the Control Group. Late onset of menarche (≤ 15 years) in pregnant women in these groups was (11 % and 12 %) to 2 % in the Control Group ($P < 0,001$). Studying the length of a menstrual cycle showed that the most typical length of menstrual cycle is 3–5 days for both the pregnant women with reproductive losses and the women from the Control Group.

Menstrual cycle was 20–30 days in 64 women of the First Group (64 %), in 58 women from the Second Group (58 %) and in 84 women from the Control Group (84 %).

The length of menstrual cycle is less than 21 days in the First Group – 21 % and in the Second Group – 23 % which is significantly higher than in the Control Group – 6 % ($P < 0,005$).

Menstrual cycle lasting more than 30 days occurred with almost equal frequency in both Groups – (15 %) – the First Group and (19 %) – the Second Group; which is 1,5 times higher than in the Control Group.

Reproductive functions were assessed on the basis of sexual debut and the number of pregnancies in anamnesis and their consequences.

The average age of sexual initiation in the tested group was ($18,3 \pm 0,4$) years. Most women started their sexual lives at the age of 14–22. Almost half of them at the age of 16–19. 36 % of women in the First Group and 35 % of women in the Second Group began their sexual life much earlier than 14–16. In general, the women with early pregnancy losses in anamnesis began their sexual life 1,5–2 years earlier in comparison with the women in the Control Group.

Analyzing the reproductive history, it was proved that spontaneous abortions there were 18 % in the First Group in early terms and 2 % in late terms. While in recurrent miscarriages, the frequency of miscarriage in early terms were 16 % and 17 % in late terms, that is 8.5 times higher than in the group with spontaneous abortion. The percentage of undeveloped pregnancy was 6 % in the First Group and 9 % in the Second Group. It should be noted that preterm delivery prevailed in the group with recurrent miscarriage and it was 27 %. While in women with spontaneous abortion it was 18 % and immediate delivery frequency in the groups with early pregnancy losses in anamnesis associated with vaginal dysbiosis was (56 % and 48 %) against 78 % in the Control Group ($P < 0,005$).

One of the major complications of childbirth in women with vaginal microbiota violation is premature rupture of the membranes (11 % and 26 %) and anomalies of labor activity (23 % and 19 %). It is also marked a high percentage of entanglement of umbilical cord around the neck of the fetus (30 % and 31 %). It should be noted that rapid delivery prevailed, almost 3 times and premature detachment of normally located placenta was observed 2.5 times more often than in the first clinical group. Hypotonic bleeding was 4 % and 7 %.

Assessment of neonatal Apgar is determined no less important marker that indicates the consequences of delivery. So, in the First Group there were 78 % of the newborn without asphyxia (8–10 points), 15 % of the newborn in a state of mild and moderate hypoxia (5–7 points) and 1 % of them in a state of severe hypoxia (4 and less points). 4 % of babies in the Second Group were born in a state of severe hypoxia.

Intrauterine growth retardation was one of the most important complications that was evidenced by disparity in body weight of infants to the gestational term and in women of the First Group it was 1 % and 4 % – in the Second Group.

High level of newborn jaundice is observed in both groups – 7 % and 10 % accordingly. There is also quite a high level of postnatal infection in particular to

newborns of mothers from the Second clinical Group – 8 % against 4 % in the First Group ($P < 0,05$).

Conclusions. Therefore, our findings suggest that "the syndrome of early pregnancy losses" in anamnesis associated with vaginal dysbiosis is a complicated obstetrical pathology at high risk for the mother, fetus and newborn. Disorders of reproductive health in women with early reproductive losses are mostly manifested and typical for women with recurrent incompetent pregnancy. It is offered to use clinical markers as possible predictors of incompetent pregnancy.

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РЕПРОДУКТИВНЕ ЗДОРОВ'Я ЖІНОК З РАННЬОЮ ВТРАТОЮ ВАГІТНОСТІ В АНАМНЕЗІ, АСОЦІЙОВАНОЮ З ДИСБІОЗОМ ПІХВИ

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У статті в порівняльному аспекті наведено результати дослідження вибіркового клініко-статистичного аналізу архівного матеріалу історій пологів у жінок з репродуктивною втратою вагітності в анамнезі, асоційованою з дисбіозом піхви. Найбільш виражені порушення репродуктивного здоров'я у жінок з ранніми репродуктивними втратами характерні для осіб із сталим невиношуванням. Запропоновано використання клінічних маркерів як можливих предикторів невиношування вагітності.

Ключові слова: вагітність, репродуктивне здоров'я, невиношування, дисбіоз піхви.

РЕПРОДУКТИВНОЕ ЗДОРОВЬЕ У ЖЕНЩИН С РАННЕЙ ПОТЕРЕЙ БЕРЕМЕННОСТИ В АНАМНЕЗЕ, АССОЦИИРОВАННОЙ С ДИСБИОЗОМ ВЛАГАЛИЩА

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В статье в сравнительном аспекте приведены результаты исследований избирательного клинико-статистического анализа архивного материала историй родов у женщин с репродуктивной потерей беременности в анамнезе, ассоциированной с дисбиозом влагалища. Наиболее выраженные нарушения репродуктивного здоровья у женщин с ранней репродуктивной потерей характерны для лиц с привычным невынашиванием. Предложено использование клинических маркёров как возможных предикторов невынашивания беременности.

Ключевые слова: беременность, репродуктивное здоровье, невынашивание, дисбиоз влагалища.