

СЕКЦІЯ XXV. МЕДИЧНІ НАУКИ ТА ГРОМАДСЬКЕ ЗДОРОВ'Я

OBSTETRIC AND PERINATAL CONSEQUENCES OF CHILDBIRTH IN WOMEN WITH UTERINE LEIOMYOMA

RESEARCH GROUP:

Siusiuka V.

Doctor of Medical Sciences
Department of Obstetrics and Gynecology
Zaporizhzhia State Medical University
«Regional perinatal center» of the Zaporizhzhia regional council, Ukraine

Kyryliuk A.

Candidate of Medical Sciences
Director of a municipal non-profit institution
«Regional perinatal center» of the Zaporizhzhia regional council
Department of Obstetrics and Gynecology
Zaporizhzhia State Medical University, Ukraine

Shevchenko A.

Candidate of Medical Sciences
Department of Obstetrics and Gynecology
Zaporizhzhia State Medical University
«Regional perinatal center» of the Zaporizhzhia regional council, Ukraine

Boguslavska N.

Candidate of Medical Sciences
Deputy director of a municipal non-profit enterprise
«Regional perinatal center» of the Zaporizhzhia regional council
Department of Obstetrics and Gynecology
Zaporizhzhia State Medical University, Ukraine

Babinchuk O.

Candidate of Medical Sciences
Head of the maternity ward of a municipal non-profit enterprise
«Regional perinatal center» of the Zaporizhzhia regional council
Department of Obstetrics and Gynecology
Zaporizhzhia State Medical University, Ukraine

Bachurina O.

Head of the consultative and diagnostic department
Of a municipal non-profit enterprise
«Regional perinatal center» of the Zaporizhzhia regional council, Ukraine

Uterine leiomyoma (LM) is the most common benign tumor of the female reproductive system [1, 2, 3, 4]. A significant number of negative factors of natural and social environment,

in combination with individual characteristics of a female body, often leads to violations of adaptation mechanisms and the development of certain changes in the neuroendocrine system, which can be a trigger in the formation of LM [5]. The incidence of this disease is 30-50% and the statistics of pregnancies with the presence of LM is disappointing. Thus, only in half of pregnant women the presence of nodes does not cause problems during pregnancy, in a third - can cause abortions and premature births [6]. As a rule, there is a significant growth of fibroids during pregnancy, so it is difficult to predict its consequences for both mother and fetus [5]. The frequency of pregnancy on the background of LM varies from 1.6% to 10.7% depending on the quality of diagnostic methods. More often this pathology is found in pregnant women of late childbearing age [7, 8]. The peak of the disease occurs at 35-45 years [1]. However, to date, an increase in the incidence of LM in women of young reproductive age (53% before 35 years) and in the number of pregnant women with this pathology was found [5].

The course and consequences of pregnancy depend on a location and size of the tumor, a location of the placenta, a state of the fetoplacental complex. The presence of LM can cause complications such as placental insufficiency, fetal growth retardation, threatened abortion, impaired blood supply to myomas [8]. An asymptomatic course during pregnancy can be present. Women with LM have a higher rate of pelvic presentation and cesarean section than other women. Most of them (70%) successfully give birth naturally, except the cases of cervical nodules [9]. Studies have shown that from all cases of LM detected by ultrasound during pregnancy, 36% are not visualized after delivery, and in 79% - the size of tumors is reduced [10].

The aim of the study - to assess the structure and frequency of obstetric and perinatal complications in pregnant women with uterine leiomyoma.

Materials and methods The study of primary medical records of 87 cases of childbirth in women with uterine leiomyoma was studied. The mean age of women was 32.8 ± 0.5 years.

The results of the study and their discussion In 35 (40.2%) cases, LM was diagnosed before pregnancy and 52 (59.8%) during pregnancy. In 32.2% of pregnant women the nodes were multiple, and in 67.8% of cases single formations were determined.

After the examination of the anamnesis data it was found that more than half of women with LM (51.7%) had extragenital pathology: vegetative-vascular dystonia (12.6%), obesity (10.3%), varicose veins (8.1%), mitral valve prolapse (6.9%) and chronic pyelonephritis (6.9%).

Among the gestational complications in this category of pregnant women with LM were noted: infertility (70.7%), early preeclampsia (17.2%), preeclampsia of various degrees (17.2%) and anemia (34.5%).

Premature rupture of membranes (17.2%), weakness of labor (8.6%), fetal distress (3.5%) occurred during childbirth. 39.7% of women with LM were delivered by caesarean section. Characterizing the condition of newborns it should be noted that 94.3% were born with a high score on the Apgar scale. Fetal growth retardation occurred in 12 cases, which was 13.8%. In 5 cases (5.7%) asphyxia occurred.

Conclusions:

The results of the study showed that more than a half of women with uterine leiomyoma had extragenital pathology (51.7%). Women with uterine leiomyoma have a high frequency of obstetric and perinatal complications, as well as surgical delivery.

References:

1. Khmil S. V., Korda I. V., Drozdovska Yu. B., Khmil M. S., Chudiyovych N. Ya. Uterine leiomyoma and infertility (literature review). Bulletin of Social Hygiene and Health Protection Organization of Ukraine. 2017; 4 (74): 97-103.

2. Navarro A., Bariani M. V., Yang Q., Al-Hendy A. Understanding the Impact of Uterine Fibroids on Human Endometrium Function. *Front Cell Dev Biol.* 2021; 25, 9: 633180.
3. Alset D., Pokudina I. O., Butenko E. V., Shkurat T. P. The Effect of Estrogen-Related Genetic Variants on the Development of Uterine Leiomyoma: Meta-analysis. *Reprod Sci.* 2022; 29 (6): 1921-1929.
4. Shurpyak S. A. Uterine fibroids and pregnancy: clinical features, complications and treatment. *Health of woman.* 2013; 2 (78): 67-73.
5. Dronova V. L., Dronov O. I., Tesliuk R. S., Mokryk O. M., Roshchyna L. O., Bakunets Yu. P. Clinical and statistical analysis of detection of the incidence of uterine leiomyoma in patients during pregnancy and childbirth. *Ukrainian journal Perinatology and Pediatrics.* 2020; 2 (82): 35-41.
6. Semenyak A., Yuzko O., Nytsovykh I. Uterine leiomyoma and pregnancy. *Neonatology, surgery and perinatal medicine.* 2018; 2 (28): 93-98.
7. Qidwai G. I., Caughey A. B., Jacoby A. F. Obstetric outcomes in women with sonographically identified uterine leiomyomata. *Obstet Gynecol.* 2006; 107 (2 Pt1): 376-82.
8. Golyanovskiy O. V., Supruniuk K. V., Frolov S. V. Uterine leiomyoma in women of reproductive age: pregnancy and childbirth management (Literature review). *Reproductive health of woman.* 2021; 3 (48): 48-56.
9. Shurpyak S. A. Uterine fibroids and pregnancy: clinical features, complications and treatment. *Health of woman.* 2013; 2 (78): 67-73.
10. Laughlin S. K., Herring A. H., Savitz D. A. et al. Pregnancy related fibroid reduction. *Fertil Steril.* 2010; 94: 2421-3.