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ORGAN-SPARING TECHNOLOGIES IN THE TREATMENT OF UTERINE LEIOMYOMA

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Bukhara State Medical Institute named after Abu Ali ibn Sino

Resume

In this article, we studied 25 women who have passed with EMA. Studies show that EMA is the most optimal treatment for fibroids in patients of reproductive age, which allows to maintain reproductive and menstrual functions.

Keywords: uterine myoma, EMA, embolization.

ОРГАНОСБЕРЕГАЮЩИЕ ТЕХНОЛОГИИ В ЛЕЧЕНИИ ЛЕЙОМИОМЫ МАТКИ

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Рзеюме

В этой статье мы изучили 25 женщин, которые прошли с ЭМА. Исследования показывают, что ЭМА является наиболее оптимальным методом лечения лейомиомы у пациентов репродуктивного возраста, что позволяет поддерживать репродуктивные и менструальные функции.

Ключевые слова: лейомиома матки,ЭМА,эмболизации.

БАЧАДОН ЛЕЙОМИОМАСИНИ ДАВОЛАШДА ОРГАНЛАРНИ САҚЛАШ ТЕХНАЛОГИЯЛАРИ

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Резюме

Ушбу мақолада биз ЭМА билан кечган 25 та аёлни ўрганиб чиқдик. Тадқиқотлар шуни кўрсатадики, ЭМА репродуктив ёшдаги беморларда лейомиоманинг даволашнинг энг мақбул усули бўлиб, бу репродуктив ва ҳайз кўриш функцияларини сақлаб туришга имкон беради.

Калит сўзлар: бачадон миомаси, ЭМА,эмболизация.

Relevance

In modern obstetrics, the preservation of reproductive function in women of childbearing age remains a pressing issue. Cases of uterine leiomyoma development in active reproductive age have become more frequent, leiomyoma is diagnosed in every third woman over 35 years old, which creates real problems in the treatment of uterine leiomyoma at this age [1,3]. In recent years, there has been an increase in the frequency of uterine leiomyoma detection in young women (20-25

years old), which is largely due to the introduction of new, more advanced diagnostic methods and their greater availability [2,4].

Developing in women of reproductive age, uterine leiomyoma leads to the formation of infertility, miscarriage, perinatal losses, which negatively affects the demographic situation in the country [5,7].

To date, about 70% of patients in gynecological hospitals undergo radical surgical treatment [6,8]. This leads to irreversible infertility, loss of menstrual function, severe hormonal disorders, vegetative-vascular and psychoemotional disorders [9,11].

Uterine leiomyoma is a polyetiological disease. The literature describes many hypotheses for the occurrence of the tumor, as well as numerous risk factors for the development and progression of the disease, caused by both endogenous and environmental causes. At the same time, to date there is no single understanding of the mechanisms of the occurrence of a benign tumor process in the myometrium [10,12]. The problems of finding pathophysiological mechanisms for the development of uterine myoma and developing effective methods of conservative treatment of the tumor process in the myometrium are due to two circumstances: firstly, the widespread prevalence of the disease and, secondly, the high frequency of surgical treatment of this benign tumor of the uterus. The causes of uterine leiomyoma have not been definitively established.

Uterine leiomyoma is the most common cause of abnormal uterine bleeding, infertility, habitual pregnancy loss, and pelvic dysfunction. These symptoms significantly worsen a woman's quality of life (13,15)

Uterine artery embolization (UAE) is one of the alternative treatments for uterine leiomyoma. This method allows you to fight a benign tumor without active surgical intervention, preserving the patient's fully functioning uterus. The essence of UAE is the introduction of occlusive material into the uterine arteries and the cessation of blood flow through the vessels supplying the myoma [14].

At the same time, the vessels supplying the healthy part of the myometrium are not affected. This is possible due to the peculiarities of blood flow in the myoma. Numerous studies, including ours, have shown that UAE is highy effective in eliminating the pathological process in the uterus. UAE is performed by an endovascular surgeon. The embolization operation does not require general anesthesia, since the vessels do not have nerve endings[16,17].

Objective:

The objective of this study was to study organ-preserving technologies in the treatment of uterine leiomyoma.

Materials and methods of examination:

We examined 25 women who underwent UAE. All patients were identical in age, the average age was 29.6 +/- 1.2 years. Color Doppler mapping was used as the main research method, which was applid before and after UAE surgery, allowing to identify a certain dependence of changes in blood flow in the uterine arteries and branches. All patients were examined before UAE surgery. On the first day after surgery, and then in the interval 7.14, 30.60 and 90 days afer surgery. Analysis of these changes in dynamics allowed us to identify some criteria for assessing the effectiveness of UAE depending on the blood circulation in the nodes. Before the operation, color Doppler mapping of the main trunks of the uterine arteries on both sides was performed with measurement of their diameter. The course of the arteries was studied, and the main speed characteristics of blood flow and indices of peripheral resistance were investigated.

Results of the study:

The study revealed that the diameter of the uterine increased proportionally to the size and number of myomatous nodes. The vascular network of leiomyomatous nodes was moderately and unevenly developed, and was most often represented by peripheral hypervascularization. Visualization of these vessels facilitated the detection of leiomyomatous nodes, determining their volume and location relative to the layers of the uterine myometrium. Submucous was detected in -6, interstitial in 8, subserous in -11 patients. Depending on the number of vessels presented, all leiomyomatous nodes, regardless of localization, were divided into hyper- and hypovascularized by the nature of the blood flow. The branched vascular network was, as a rule, represented in nodes with pronounced proliferative activity and did not depend on their localization relative to the layers of the uterine myometrium. In nodes with a predominance of the fibrous component, the vascular network was represented by separate, centrally located vessels.

Immediately after the intervention, visualization of the uterine arteries and vessels of the nodes is performed using color Doppler ultrasonography. With adequately performed embolization, blood flow through the uterine arteries was not localized. The size of the leiomyomatous node in the first day after the intervention may not change or even slightly increase due to post-ischemic edema. A positive result of EMA was the complete cessation of blood flow in the node, which is accompanied by rapid reverse development of the leiomyoma and fibrous node, especially its subserous forms. Small myomatous nodes completely disappeared by 6-12 months after EMA in 23 patients, which amounted to 82% of the total number of patients.

The presence of blood flow in the uterine arteries and in the nodes, recorded during ultrasound examination in two patients (8%) of the total number of patients, was assessed by us as an unsatisfactory result of embolization, for whom surgical correction was recommended.

Conclusions:

The obtained data allowed us to conclude that UAE is the optimal method for treating leiomyoma in patients of reproductive age, which makes it possible to preserve reproductive and menstrual function.

UAE is an alternative to surgical treatment of patients with uterine leiomyoma. UAE has a positive effect on the quality of life of patients.

Ultrasound examination with angio scanning is a sufficiently informative method for assessing the effectiveness of UAE, early detection of recurrence of uterine leiomyoma after intervention and the choice of timely surgical tactics.

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