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UTERINE MYOMAS

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Abstract: This article is written on the basis of the national standard of the Ministry of health of the Republic of Uzbekistan , which talks about measures to properly diagnose , treat and prevent patients with uterine myomas at present . Among women of reproductive age, the incidence of the disease reaches 70%. The median age for detecting uterine fibroids is 32-34 years, and the highest level of the disease occurs at the beginning of menopause. Currently, there is an increase in the incidence of uterine fibroids in young women under 30 years of age who have not performed their reproductive function.

Keywords: Submucous myomas , subserous myomas , interstitial myomas ,hypermenorrhea, menopause , reproductive age , esterogenic, gestogenic , tumor malignancy .

Introduction. Uterine fibroids are the most common benign tumors of the female reproductive system. Among women of reproductive age, the incidence of the disease reaches 70%. The median age for detecting uterine fibroids is 32-34 years, and the highest level of the disease occurs at the beginning of menopause. Currently, there is an increase in the incidence of uterine fibroids in young women under 30 years of age who have not performed their reproductive function.

In most women, the disease is asymptomatic, which makes it difficult to assess the actual prevalence. 25% of patients of reproductive age have a clinical picture that requires treatment. In primary and secondary infertility, uterine fibroids occur in 23.5% of cases. In some cases, uterine fibroids do not prevent the onset of pregnancy and the development of the fetus, but increase the frequency of pregnancy and childbirth complications.

Uterine fibroids are a benign monoclonal tumor originating from smooth muscle cells of the cervix or uterine body.

Classification of uterine myomas by the International Federation of Gynecology and Obstetrics (FIGO) :

Submucous fibroid	0	node in the space in the "leg"
	1	< 50% intramural component
	2	≥ intramural component

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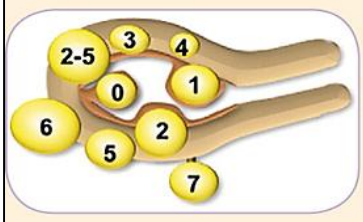
	3	in contact with the endometrium, 100% intramural node
 Others	4	Intramural
	5	Subseros ≥50% intramural
	6	Subseros <50% intramural
	7	in the "leg" Subseros
	8	other
Hybrid (in contact with endometrium and serous membrane) 2-5 Submucoses or subseroses	2-5	Submucos or subseros

Etiology and pathogenesis

Estrogens and progesterone are traditionally thought of as stimulants of leiomyoma growth, confirmed by estrogen receptors, significantly greater expression of estrogen-controlled genes in them, and to a greater extent by expression of comparison with progesterone receptors (isoforms A and B) myometrium and endometrium.

The genetic nature of this disease is confirmed by the presence of "family forms" of uterine fibroids in 5-10% of women, while uterine fibroids have been shown to be monoclonal tumors, i.e. its growth occurs from a single primary mutant cell with unregulated growth capacity. The most important contribution to the pathogenesis of uterine fibroids is associated with chromosome restructuring associated with increased expression of the HMGA2 gene, as well as somatic mutations of the exon 2 gene of the Med 12 gene encoding RNA polymerase 2.

The process of forming new vessels – neoangiogenesis-from existing vessels also contributes significantly to the pathogenesis of uterine fibroids.

Growth factors also play a key role in the development of uterine fibroids. The main growth factors involved in the pathogenesis of uterine fibroids are insulin-like growth factors (IGF), vascular endothelial growth factor (VEGF), hypoxia-inductive factor (HIF), fibroblast growth factor, platelet-induced growth factor, angiogenin, epidermal. growth factor, nitric oxide, interleukin-8, matrix metalloproteinases (MMPs). All these factors form a complex system of interaction and activation cascades with a fundamental role in the molecular pathogenesis of the leiomyoma.

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Risk factors associated with the development of uterine fibroids include early menstruation, lack of birth history, late reproductive age, obesity, tamoxifen uptake, high parity, menopause, smoking, COC uptake, and inflammatory processes.

Clinical picture .

Diagnosis of uterine fibroids is determined on the basis of complaints of pelvic organs, anamnestic data, physical examination, ultrasound and MRI data (according to the instructions). Complaints and Anamnesis Manifestations of uterine fibroids can be asymptomatic and symptomatic. Symptoms of the disease: abnormal uterine bleeding, abdominal pain of different and intensity, painful and abundant menstruation, infertility in the absence of other causes, abortion, dysfunction of neighboring organs (dysuric diseases, constipation), dyspareunia, etc.

Diagnostics

Physical examination

1 for diagnosis, all patients are advised to carry out a visual examination of external sexual azos, a cervical examination in mirrors and a bimanual vaginal examination.

Bimanual vaginal examination involves determining the size, mobility, tenderness of the uterus and its connection with other pelvic organs; identification of myomatous nodes, as well as their localization. The size of the uterus is measured in weeks (by pregnancy).

With cervical-Isthmus localization of the myomatous node, the cervix is flattened, asymmetrically located, and moves to the pelvic wall opposite the localization of the node.

Laboratory diagnostic tests

2 all patients with uterine fibroids are advised to observe laboratory data to identify complications, check before surgery and determine conservative treatment tactics.

The study of General blood analysis, biochemical blood analysis, hemostasiogram is carried out in order to identify complications (anemia, circulatory disorders in the node, etc.).), preoperative examination, and determination of conservative treatment tactics.

Instrumental Diagnostic Research

3. ultrasound examination of the pelvic organs (UTT) is recommended as the main method of screening and primary diagnosis of uterine fibroids.

Ultrasound of the pelvic organs (using transabdominal and transvaginal sensors) is a method of primary screening for uterine fibroids, dynamic monitoring of the progression of the disease and assessing the effectiveness of therapeutic effects of various types (conservative and/or surgical).

The method includes myomatous nodes, their structure, hemodynamics and, accordingly, the severity of proliferative processes, differential diagnosis (adenomyosis, sarcoma, etc.), detecting

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secondary changes in nodes as a result of circulatory disorders (necrosis, edema, hyalinosis).

Modern 3/4-d technologies make it possible to obtain additional information about the localization of fibroid nodes, which is especially important for their centralized growth and submucous location. The color Doppler map is used to evaluate the structure of the myomatous node. In some cases, exogisterography and hysterosalpingography may be used.

4. in patients planning to perform reproductive function for differential diagnosis with adenomyosis, it is recommended to use magnetic resonance imaging (MRI) of the pelvic organs in patients with concomitant pathology in the selection of volume and access when planning compression of adjacent organs and Reconstructive Plastic Surgery.

In 40% of cases, uterine fibroids are combined with adenomyosis.

5. hysteroscopy is recommended for patients suspected of intermuscular-submucosal and submucosal localization of myomatous nodes to exclude intrauterine pathology; as well as choosing an approach for surgical treatment (hysteroscopic myomectomy).

Treatment

Conservative treatment

S dynamic monitoring of asymptomatic uterine fibroids of small size is recommended (absence of AMK (BACC), pain syndrome, growth of myomatous nodes, uterine dimensions up to 12 weeks, in the absence of myomatous nodes of submucous localization).

in the asymptomatic period of the disease, when the uterus is small in size, no medication and / or surgical treatment is indicated.

In patients with uterine fibroids, it is recommended to carry out drug therapy to relieve symptoms (AMK, pain syndrome) and concomitant gynecological diseases.

When choosing a drug therapy option, it is necessary to assess not only its effectiveness, but also its safety, tolerability, as well as take into account the economic profitability of treatment. Ongoing drug therapy should be evaluated every 3 months, and other medications should be prescribed if it is ineffective. It should be remembered that the only purpose of drug treatment is to relieve or eliminate symptoms associated with uterine fibroids, regression of myomatous nodes.

To reduce the amount of V blood loss, it is recommended to use tranexamic acid in patients with uterine fibroids and Bacchus.

The optimal daily dose of tranexamic acid is 3.9-4.0 g, the duration of intake is up to 5 days. The frequency of side effects when taking the drug is minimal, and they are mainly manifested by mild nausea, headache, nasal congestion and back pain. Tranexamic acid helps reduce blood loss during menstruation by 40%.

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C to reduce pain and blood loss, it is recommended to use nosteroid anti-inflammatory drugs (NSAIF) in patients with dysmenorrhea and uterine fibroids with Bacchus.

NSAIF reduce the activity of TsOG-2 (its expression is significantly higher in uterine fibroids compared to normal myometry) and prostaglandin levels, reducing the severity of pain and the amount of blood loss.

For the treatment of Bakk, it is recommended to use progestogens (according to the anatomical-therapeutic-chemical classification of drugs (ATK) - progestogens) in patients with uterine fibroids.

To ensure atrophy of the Glandular epithelium and desidulation of the stromal component, therapy with progestogens is recommended to be carried out in a largely continuous mode. Oral progestogens reduce the corresponding symptoms of the disease, the effectiveness of which depends on the administration regimen. In the cyclic mode (from the 14th to the 26th day of the cycle), the efficiency is 0-20%, in the 21-day mode (from the 5th to the 26th day of the cycle)-30-50%.

Progestogens do not affect the stabilization or reduction of the growth of myomatous nodes, but they can be used as a medicine to reduce the size of the Bacchus, as well as to prevent endometrial hyperplastic processes associated with uterine fibroids. Progestogen therapy is inappropriate in the presence of submucous uterine fibroids.

A to reduce the volume of blood loss, it is recommended to use #levonorgestrel in the form of an intrauterine therapeutic system as an alternative treatment for patients with uterine fibroids and AUB (according to ATX - gestagenic plastic spirals).

The use of LNG-BIS has contraindications in cases of submucosal localization of myomatous nodes, in myomatous nodes with centralized growth. LNG-BIS contains 52 mg levonorgestrel, which is released at a dose of 20 mcg per day for the first 5 years. LNG-BIS effectively reduces the volume of blood loss by 74-97%, without affecting the size of myomatous nodes.

In patients with uterine fibroids, it is recommended to use combined oral contraceptives (in the case of ATX - progestogens and estrogens (solid combinations))in order to relieve contraception and symptoms.

This group of drugs effectively reduces the volume of menstrual blood loss without affecting the growth of fibroids.

Use of gonadotropin-releasing hormone (aGn-RG) agonists (analogs of gonadotropin-releasing hormone ATX) in patients with uterine fibroids and anemia is recommended as a preoperative treatment, as well as to reduce the size of myomatous nodes and reduce intraoperative blood loss.

Hormone analogs that release gonadotropin are one of the effective drugs that affect the symptoms caused by uterine fibroids and temporarily affect the volume of myomatous nodes,

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while the duration of treatment is limited to 6 months due to side effects (hypoestrogenism, loss of bone mineral density). The duration of preoperative treatment is limited to 3 months.

A use of mifepristone (according to ATX - progesterone antagonists) is recommended in patients with uterine fibroids and ABQK.

The use of mifepristone at a dose of 2.5-5 mg for 3-6 months reduces the volume of blood loss in the fibroids and improves the quality of life without significantly reducing the volume of the myomatous node.

Surgical treatment

Surgical treatment of uterine fibroids in patients with indications C.

Indications for surgery:

1) Bacchus causing anemia (obstetric bleeding from the uterus);

2) chronic pelvic pain that reduces the quality of life;

3) signs of tightness of neighboring organs (rectum, bladder, urinary tract);

4) large tumor size (more than 12 weeks of pregnancy); 5) rapid tumor growth. (Growth of the uterus equal to the period greater than 4 weeks of pregnancy for 1 year);

6) postmenopausal tumor growth;

7) subcutaneous location of the fibroid node;

8) intercostal and low (neck and cervix) location of fibroid nodes;

9) reproductive dysfunction (absence of pregnancy, infertility in the absence of other causes);

10) signs of circulatory disorders in uterine fibroids nodes (necrosis, swelling, hyalinosis).

Written consent of the patient to the planned volume of surgical treatment is required.

S hysterectomy in patients with uterine fibroids when there are indications for surgery, in the absence of reproductive plans, after receiving the patient's informed consent.

The only effective treatment for uterine fibroids is a general hysterectomy. After excluding the pathology of the cervix, subtotal hysterectomy can be performed (cytological examination of the cervix micropreparate + molecular biological study of diversions from the cervical canal for the human papilloma virus (Papilloma virus), colposcopy, biopsy according to the instructions), but its advantages have not been proven. Vaginal amputation is not recommended when combined with adenomyosis and due to the possibility of recurrence of the disease, given that there is no clear limit to damage.

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A surgical treatment (myomectomy) that stores organs in patients who want to perform reproductive function.

Surgical treatment is carried out in a planned way at the first stage of the menstrual cycle (day 5-14). Myomectomy can be performed by laparoscopic or laparotomy. During reconstructive-plastic operations, access is determined depending on the clinical situation, the presence of a group of specialized surgeons and conditions (availability of equipment).

When performing laparoscopic myomectomy, it is recommended to use morselation in a special container to exclude spread.

A hysteroscopic removal of submucosal myomatous nodes no more than 4-5 cm in diameter in patients with uterine fibroids.

Hysteropic myomectomy can be combined with ablation and resection of the endometrium. In the case of submucosal nodes at birth, myomectomy should be carried out with a revision of the uterine cavity and a vaginal approach. Vaginal access is best suited for partially or completely localized fibroids in the cervical vagina.

V vaginal hysterectomy is recommended for surgical treatment of uterine fibroids (if any) and uterine volume up to 12 weeks.

A number of conditions are required for the use of Vaginal access: sufficient vaginal capacity and mobility of the uterus; it is often carried out in conjunction with reconstructive-plastic operations in the uterine prolapse, as well as in cases of inability to catch stressed urine.

A perform endovascular embolization of uterine arteries (EMA) in patients at high surgical risk as an alternative to surgical treatment if there are no conflicting indications in patients who do not plan a pregnancy.

Indications, conditions and contraindications are prescribed by an obstetrician-gynecologist. Embolization or surgical occlusion of the uterine arteries can be offered for individual women with symptomatic fibroids who want to maintain the uterus. For the treatment of fibroids, women who choose to have uterine artery blockages should be advised of possible risks, including that the procedure can affect the course of childbirth and pregnancy. After embolization of the uterine arteries, a low frequency of pregnancy, high abortion rates and negative pregnancy outcomes are noted after myomectomy. Endovascular embolization of the uterine arteries is associated with a decrease in ovarian, ovarian reserve, especially in patients of older reproductive age.

In patients with uterine fibroids, it is recommended to perform an MRI (MRgFUS) guided focused ultrasound ablation as an organ-preserving treatment if the conditions are met and there are no conflicting indications.

Indications, conditions and contraindications are prescribed by an obstetrician-gynecologist doctor.

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Prevention (prevention)

A specific prophylaxis of uterine fibroids has not been developed.

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