## NEW POSSIBILITIES IN MEDICAL TREATMENT OF UTERINE MYOMA.

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Objective: nowadays the problem of uterine myoma has acquired special significance in Russia as well as in many other countries. Although a lot of scientific and clinical trials devoted to different aspects of myoma are being carried out, the amount of women suffering myoma still remains high. Uterine fibroids are more common in women who are obese, and there appears to be an increased familial incidence. Although fewer than one half of them are estimated to produce symptoms, uterine fibroids may cause different symptoms including menorrhagia, intermittent menstrual bleeding, pelvic pain, urinary frequency and constipation [1]. According to the results of preventive examinations in different climatic zones of Russian Federation, morbidity in big cities is significantly higher than in villages, and the lowest sick rate is among natives, living in the northern part of Russia [2]. The majority of women find out about their disease when they are able to work (20 to 40 percent of women age 35 and older have uterine fibroids of a significant size [2]) and when the limitation of this ability costs a lot to the state. Leiomyoma and the consequences of its treatment play a certain role in reducing national fertility as well. All these points make the problem of treating myoma more and more actual.

Earlier women suffering uterine fibroids underwent hysterectomy, but in last few years the National Institute for Health and Clinical Excellence guides that Uterine Artery Embolization should be made available as one of the options for treatment, with a possible reduction in the need for hysterectomy as the first-line treatment [3]. Gormonotherapy should be a part of any organ-preserving therapy, and there are various variants of treatment at this stage already. Thus the aim of our research was to analyze Russian and foreign experiences of myoma treatment (code D25.1 according to ICD-10), their pharmacoeconomic significance, as well as to assess the level of awareness of physicians in the regional hospitals about the current medicines used for uterine fibroids treatment.

Materials and methods: Records of treating patients suffering uterine myoma (uterine size less than 12 weeks of gestation), published in Russian sources, as well as the results of the latest studies, carried out by Russian and foreign gynecologists, dedicated to finding new, more cost-effective drugs, having less side-effects, have been studied. An open poll of 22 gynecologists about the tactics of medical treatment of uterine myoma was carried out.

Results: According to the Standards of medical help to women suffering uterine fibroids, a six-month-course of treatment includes norethisterone by the following scheme: 5mg daily from 5th to 25th day of menstrual cycle (equivalent dose course - 225mg) and goserelin by the following scheme: 3,6mg once in 4 weeks (equivalent dose course - 21,6mg)[4].

According to the latest data, complex myoma treatment can be divided into two stages. Medicines with powerful potential to reduce leiomyoma size and stop the symptoms (like gonadotrophin-releasing hormone (GnRh) agonists) should be prescribed at the first stage. The second stage expects the use of drugs like gestagens or combined oral contraceptives that include desogestrel as one of the compounds, that will stabilize the achieved results in reducing leiomyoma size. Periods of their prescription depend on the woman's future plans: whether till the planned pregnancy or till the physiological menopause in order to prevent recurrence of myoma [5].

According to the Federal guidance, Issue 2009, there is still a number of GnRh agonists in the arsenal of a gynecologist not specified in Russian standards in 2004 (triptorelin, buserelin, leyproprelin). These drugs have direct prescription - uterine myoma. Questioning of physicians showed that buserelin is used in real clinical practice more frequently than others because of their high cost. However we paid careful attention to one more drug from the group of antiprogestins, information about which is widely represented in foreigh sources. - mifepristone. Unfortunately, it is well-known

among regional gynecologists only like an abortion pill. In Russia it is recommended to prescribe mifepristone 50mg daily for 3 months (equivalent dose course - 4500mg) to treat myoma, but British Association of gynecologists insist on prescribing low doses of mifepristone for 6 months (10mg daily, equivalent dose course - 1800mg) [6]. Despite the low dose, the effect of mifepristone is statistically significant: leiomyoma size was reduced by 45-52%, adjusted uterine size was reduced by 47%, rates of anemia improved, leiomyoma-specific quality of life (Uterine Fibroid Symptoms Quality

of Life Questionnaire and Medical Outcomes Study 36-Item Short Form survey) improved as well [6]. We conducted a comparative evaluation of direct expenses on myoma treatment. Average costs of treating women according to the proposed standard (norethisterone+goserelin) and with mifepristone were estimated. Direct expenses on mifepristone treatment can reduce the financial burden on the patient more than twice. Questioning of physicians on this subject showed that 100% of them knew mifepristone as an abortion pill. Only 25% of examined doctors were aware of the additional indication for mifepristone - uterine fibroids treatment, but none of them had used it to reduce the size of myoma in their practice, probably due to the recent introduction of this indication in the annotation to mifepristone as well as the absence of this drug in the current standards.

Conclusions: The comparative analysis of Russian and foreign protocols of myoma treatment as well as of information concerning new drugs from the groups of GnRh agonists and antiprogestins indicates the possibility of revising the current standards of treating uterine fibroids. Clinical pharmacologists and gynecologists should be widely informed about new pharmacoeconomic reserves in myoma treatment. It is important to inform doctors that uncomplicated uterine myoma (uterine size less than 12 weeks of gestation) can be treated by long-term administration of mifepristone, to inculcate its use into the regional practice of conservative treatment of uterine fibroid due to its clinical and pharmacoeconomical efficacy.

Key words: uterine myoma, gonadotrophin-releasing gormone agonists, antiprogestins.

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