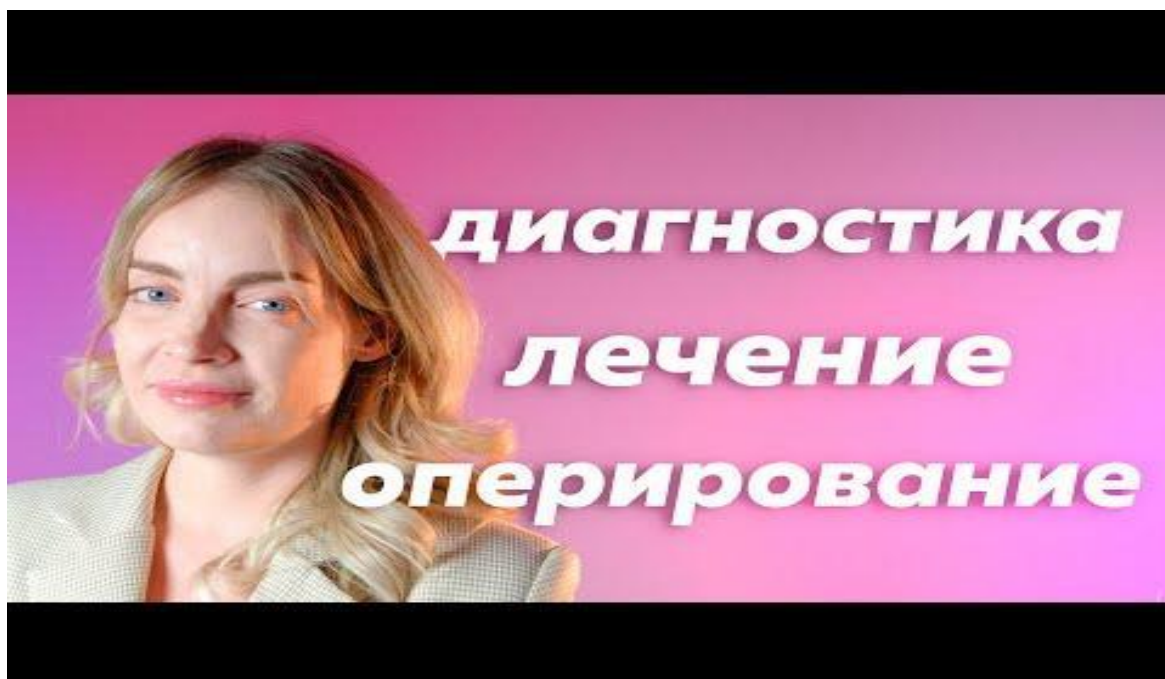


Эндометриозные кисты яичников



Hello, my dear listeners and colleagues. My name is Anna Sergeevna Ermolaeva. I work as a fertility specialist, a gynecologist and a surgeon in NGC clinic in Moscow. Today I'd like to contemplate on the subject of endometriosis, particularly:

- 1) endometrial cysts of the ovaries,
- 2) how they affect a reproductive system,
- 3) diagnostics,
- 4) if the cysts fit for operation or medicating instead;
- 5) infertility management and IVF.

As far as we know, endometriosis is a chronic inflammatory disease of unknown origin represented by the tissue similar to those in the endometrium growing outside the uterus. For instance, it may proliferate on the ovary, the pelvic peritoneum or turn into the abdominal adhesion. So how do we diagnose endometriosis and endometrial cysts of ovaries? The primary option is

ultrasound. However, the most accurate way to diagnose endometriosis is laparoscopy, undoubtedly. There are plenty of classifications of endometriosis. The most widespread classification rests on the laparoscopy results. Endometriosis of the 1st, 2nd, 3rd or 4th stage is determined. The 1st and the 2nd stages are considered to be mild, whereas the 3rd and the 4th ones pertain to the category of severe diseases. Usually, the diagnosis is based on the surgeon's laparoscopic findings. In other words, it is quite a subjective assessment. There is a special scale made to ascertain the stage of a disease.

Nowadays, the endometriosis incidence is extremely high. Every 10th woman is diagnosed with endometriosis worldwide. In case we deal with infertility factors, endometriosis is one of the main reasons for female infertility. Thus, 50% of women applying to a clinic due to this condition have endometriosis-associated infertility. There are several points in diagnostics and endometriosis-associated diseases that are crucial for the doctors. The first thing my attention is drawn to is the symptoms. So what are the most widespread of them? The first one is pain in the pelvis region which brings utmost discomfort to the patient. Pain in the pelvis region and painful sexual intercourses appear to be the most common complaints among women. So how exactly does endometriosis affect and induce infertility? Endometrioid heterotopia hitting the pelvis organs, the abdomen, the uterine tubes, the ovaries can change architectonics as well as positioning of organs relatively each other. It can also cause the uterine tube obstruction and impair the transport function and the structure of uterine tubes. According to some research, the toxic effect of endometrial heterotopia may affect spermatozoid and the fertilization. Additionally, there is a likelihood of endometriosis and poor oocyte quality interconnection, including affected oocyte effectiveness in fertilization and embryonic development in overall. Therefore, it is crucial to opt

for a proper treatment modality. In case endometriosis is suspected prior to a surgical procedure, it may be expedient to test the patient for the uterine tubes patency. Uterosalphingography is applicable on this occasion. There are three popular methods of endometriosis-associated disease management that were earlier deployed for treatment of endometrial cysts of ovaries. The first option is a hormonal therapy implying agonist and dienogest-based drugs administration. Surprisingly, all the publications including American and European recommendations proved this therapeutics to be inefficient in infertility treatment or in inducting a natural pregnancy. A therapy is to be applied exclusively in symptomatic patients or the ones with a previous endometriosis surgery, given that they are not planning to get pregnant anytime soon. Regardless of this fact, gynecologists are bound to consider the ovarian reserve of the patient before giving consent for the surgery of endometrial cysts of the ovaries or the hormonal therapy administration. The reason is that endometriosis may cause a diminished ovarian reserve. Coherently, it is ascertained in some publications that, when it comes to patients with advanced endometriosis, the toxic effect of the endometrial tissue or the follicular ovarian tissue transubstantiation with endometrial cysts prompts the diminished ovarian reserve, poor quality and an insufficient number of cells which could be used for reproductive plans fulfillment. Thus, if there are no patient's intentions to get pregnant anytime soon, the hormonal therapy is planned, no consent for surgery is acquired or the surgery is planned but the woman is not willing to get pregnant in the short term, the doctor is liable to evaluate the ovarian reserve, the number of antral follicles and Anti-Müllerian hormone levels. In case of the diminished ovarian reserve, a patient is to consult a fertility specialist on oocyte cryopreservation with a view to delaying the pregnancy. Some of the doctors tend to refer a woman to a repeated surgery in case of the endometriosis

relapse, cyst occurrence, advanced endometriosis or pain in the pelvic region. It is a miscarriage. Instead of it, the patient should consult a fertility specialist and discuss one's future reproductive plans.

The other treatment modality or diagnostics for the patients with endometriosis is a surgery, particularly laparoscopy. With regard to the publications, the diagnostic laparoscopy intended to detect endometriosis is pointless since it doesn't improve prognosis. Pregnancy occurs neither naturally, nor due to the IVF program. If the results of the surgical treatment showed coagulation of endometriod foci, the patient is to be referred to fertility specialist for the ovarian reserve evaluation. It is of the utmost importance to tell her that surgery for endometriosis is likely to diminish the ovarian reserve and the ovarian tissue. Therefore, she has to visit a fertility specialist primarily with the aim to measure the ovarian reserve and her reproductive plans in overall. The cellular infertility factor for endometriosis demands the IVF and the ART program implementation. Besides, it is essential to evaluate the size of the ovarian cysts. In case the cyst size is less than 3 cm, the patient is better to do without the surgical correction. In case of infertility and minor cysts, the patient diagnosed with endometriosis is to undergo the ART therapy. If the ovarian cyst is large, we address to the Russian clinical practice guidelines which impose surgical correction. In summary, the patient has to consult with a fertility specialist for ovarian reserve evaluation prior to joining the IVF program. In terms of poor ovarian reserve and large ovarian cysts which may result in small amount of ovarian tissue and low number of follicles by damaging ovarian tissue after the surgery, the first option is to apply to the IVF program, oocytes or embryo banking. Furthermore, the surgical treatment is applicable if the patient has a reliable partner. All modern publications claim that surgical treatment doesn't improve prognosis for the

pregnancy onset and the number of embryos within the framework of the IVF program after the surgical correction. Eventually, if the patient underwent the surgical treatment it would be proper to avoid hormonal therapy administration on the long-term basis. The best decision for the woman is to make an appointment with a fertility specialist to fulfill her reproductive plans efficiently. Hormonal therapy is only suitable and applicable in 3 cases:

- 1) the patient doesn't intend to get pregnant
- 2) the patient earlier suffering from endometriosis or treated surgically
- 3) the woman having ovarian cysts of less than 3 cm in size

Further on, when patients included in the list above consult with a fertility specialist to fulfill reproductive plans and join the IVF program, we have to keep in mind that endometriosis may cause poor results of ovarian stimulation and affect the number of oocytes obtained. The data of publications provide evidence that the endometriosis-associated factor and ovarian cysts determination demand a larger dose of medications and may cause a longer ovarian stimulation. There is a likelihood that some oocytes won't be fully grown and mature to get fertilized.

I reckon it is high time to make some conclusions on our today subject. In case endometriosis is suspected or determined, the doctor is bound to ask a woman about her reproductive plans. If the woman is referred for surgical treatment, the ovarian reserve, the number of antral follicles and Anti-Müllerian hormone levels should be evaluated. It is also of a paramount importance to inform her on the probability of oocyte vitrification, genome, egg or embryo freezing prior to the surgical treatment.

Thank you for watching this video and being with us today on the channel «IVF LIVE». We'll be waiting for your feedback! See you soon!

