



POSSIBILITIES AND PERSPECTIVE IN INTRAUTERINE SURGERY

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Introduction. Modern surgical techniques of hysteroscopy allow to perform organ-preserving operations in patients with submucous hysteroscopy. The submucous node up to 4 cm can be fully excised with electrosurgical fragmentation, if it belongs to the 0 or 1st type of localization according to European Hysteroscopists Association classification. In the IIInd type of localization and the node size over 4 cm preoperative preparation with gonadotropin-releasing hormone (GRH) agonists allows the 20-25% decrease of node size, however, intramural part of the node remains inaccessible to electrosurgical fragmentation and excludes the possibility of pregnancy planning. It raised the issue of the combined use of electrosurgery and laser energy for the ablation of submucous nodes of the IIInd type, exceeding 4 cm in size.

Material and Methods. 34 patients of reproductive age with submucous hysteroscopy of the IIInd type localization were subjected to surgical operation. Over 50% (18 patients) complained about infertility, and 97% (33 patients) had complaints about hyperpolymenorrhea, accompanied by anemization. The diameter of myomatous nodes ranged from 4,5 to 6 cm, mean $5,7 \pm 0,71$ cm. The diagnosis of hysteroscopy and localization type of the myomatous node was verified by diagnostic hysteroscopy. Patients received agonist of GRH (Zoladex®) for 2 months as preoperative preparation. The suggested surgical technique involved primary electrosurgical fragmentation of the

REHABILITATION OF THE REPRODUCTIVE FUNCTION IN PATIENTS AFTER INTRAUTERINE SURGERY OF HYSTEROMYOMA

submucous portion of the node with a loop of a "Karl Storz" resectoscope and multifocal laser myolysis of the remaining interstitial portion of the node with the fiber laser guide of the diode laser by "Alcom-Medica". The treatment of all intramural portion of the node with the laser guide with the intervals of 10 mm, 5-10 mm depth and 20-25 Wt output allows to vaporize the major volume of the node and induces necrobiotic processes in the remaining tissues. Surgery was carried out with endotracheal anesthesia, average duration of surgical operation was $50 \pm 12,74$ minutes, blood loss did not exceed 50 ml.

Results. The efficacy of laser treatment was evaluated by the decrease in the intramural node portion volume both during the operation and during ultrasound examination after 4-6 months follow-up. The control hysteroscopy after the follow-up period has shown, that in 15 patients the remaining portion of the node was expelled into the uterine cavity with a transition to the type 0 node, mean size $1,5 \pm 0,51$ cm; the nodes were ablated with a resectoscope loop. In other 19 patients the use of laser energy caused complete myolysis of intramural portions of the nodes. The ovulatory menstrual cycle has restored in 33 (97%) patients. 18 women had spontaneous pregnancy, and 4 women underwent successful extracorporal fertilization. No complications of pregnancies were noted in any case. There were 16 cases of vaginal deliveries and 6 Cesarean sections because of combined indications.

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THE EXPERIENCE OF COMBINED TREATMENT OF UTERINE SUBMUCOUS MYOMA

Introductions. With the advent of new technologies in medicine, with ultrasound procedures being widely spread and available to every woman the diagnosed cases of uterine pathology today are about 40%. Submucous uterine myoma is diagnosed in every 3d-4th cases of diagnosed uterine myoma. Submucous nodes are accompanied with profuse irregular menstrual bleeding, sterility, pain syndrome but can be asymptomatic as well. With no regard to presence or absence of clinical signs nowadays such patients are actively treated.

Material and methods. For the period from 2001 to 2004 we have performed 848 hysteroscopic operations, with 212 operations for submucous myoms of different types.

Results. We consider it justified to carry out drug preparation before hysteroscopic operations if there is submucous myoma of 1st-2nd type. If there were nodes of 0-type, hormonal preparation of endometrium was not carried out. Hysteroscopy makes it possible to remove 0-type nodes of any size. In our

case the largest removed node was of the size of 10 cm. With the diagnosed 1st-type myoma – 27%, 2nd-type myoma – 32% hormonal therapy makes it possible to shorten the time of operation, complications after the operation and with the adequate preparation of the endometrium and reaction of the tissue of myomatous node – to avoid repeated operation. Resectoscopic operations were carried out in case of myomatous nodes of up to 5-6 cm, with the presence of 2 interstitial-submucous nodes. As pre-operative preparation we used aGnRH in the 1st group (37 patients – 17,5%), gestrinon in the 2nd group (21 patients 10%), combined oral contraceptives (COC) in the 3d group (101 patients – 47,6%), no pre-operative drug therapy was carried in the 4th group (53 patients – 25%). The best result was achieved in case of aGnRH therapy in patients with 1-2 type submucous myoms. Agonists of GnRH were injected on the 1st day of menstrual cycle, ultrasound evaluation was performed in 27-28 days, practically in all cases we found out the decrease of the myomatous node size by 20-30% during the 1st month, then the 2nd injection was performed and the operation was carried out in 2-3 weeks after the 2nd injection. The peculiarities of the operations preceded with aGnRH therapy were minimal bleeding, short operation time, absence of com-

plications in post-operative period, performing of the operation in only stage without repeated resectoscopy, restoration of menstrual cycle within 1-2 months after the cancellation of therapy. In case of gestrinon used as pre-operative preparation there was worse individual tolerance of the drug, less involution of node tissue during pre-operative period. COC used as pre-operative preparation had no marked positive signs as compared with the absence of any pre-operative hormonal preparation. During post-operative period in case of resection of myoms of over 3 cm, especially in case of resection of more than 1 node, aGnRH was administered – 1-2 injections with the interval of 28 days, or COC during 5-6 months.

Conclusions. In the 1st group with aGnRH preparation within the 1st year of post-operative follow-up 3 cases of pregnancy were registered in patients of reproductive age. In the 2nd group no cases of pregnancy were registered. In the 3d group of patients with sterility there were 7 cases of pregnancy, in the 4th group – 2 cases. The obtained data received during 4 years of follow-up of such patients give us the reason to consider combined method of treatment of submucous uterine myoma of 1st-2nd type appropriate and expedient.

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LAPAROSCOPY AND HYSTEROSCOPY IN THE DIAGNOSIS OF FEMALE STERILITY

Introductions. There has been huge progress in diagnosis and treatment of female sterility recently. Assisted reproductive technologies have become more available for couples who have no children. In Kirov region with population of about 1,5 mln people statistically 47,000 families suffer from sterility.

Material and methods. 232 operations have been performed for different causes in patients with sterility in our department from January 2002 to December 2004. The age of the patients was 21 – 43 years. At pre-operative stage the patients underwent the generally accepted methods of evaluation including multiple ultrasound evaluation, hormonal profile, hysterosalpingography. The duration of sterility varied from 1 to 20 years.

Results. Regardless the previously performed invasive methods of evaluation of primary and secondary sterility, in our opinion, all laparoscopic diagnostic and surgical procedures in patients with sterility should be combined with hysteroscopic evaluation of uterine cavity. With hysteroscopy performed during operation we can detect endometrial pathology that was not diagnosed during the pre-operative stage and using ultrasound method. The following endometrial pathologies in patients with sterility have been detected by us: chronic endometritis – 12 cases (5%), endometrial

polyps – 32 cases (13,8%), mycropolyps under 5 mm in the region of tubal angle – 4 cases (1,7%), endometrial hyperplasia including nodal hyperplasia – 24 cases (10%), synechia of uterine cavity – 5 cases (2,17%), submucous myomatous nodes – 3 cases (1,3%), endometrial adenomatosis detected during histologic evaluation of a deliberately chosen endometrial area – 3 cases (1,3%).

Conclusions. Thus, in 35,7% of cases we detected endometrial pathology in patients with sterility during hysteroscopy and laparoscopy. Hysteroscopy helps not only detect endometrial pathology but evaluate uterine cavity, the accordance of endometrium to the phase of menstrual cycle, detect an occlusion in the area of tubal angles, carry out intra-operative catheterization of tubes. In case of combination of 2 methods of evaluation we always administer IV antibacterial drugs 1-2 hours before the operation or during the operation. Infectious complications have never occurred. We consider such way of performing endoscopic evaluation in sterile patients justified, even in the absence of ultrasound signs of endometrial pathology, it allows to shorten the time of evaluation of females with sterility, to detect non-obvious endometrial pathology, to administer the best course of therapy.