The efficacy of treatment of endometriosis in adolescent girls (+Poster Session)
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Context
Treatment of endometriosis in adolescent girls aimed at relief of dysmenorrhea, normalization of menstrual cycle. Endometriosis is the most common cause of secondary dysmenorrhea in adolescence. The most common symptom noted among published reviews is acquired of progressive dysmenorrhea, which was encountered in 64-94% patients. Laparoscopy genital endometriosis was diagnosed in 45 - 70% of adolescent girls with chronic pelvic pain, uncropped non-steroidal anti-inflammatory drugs and oral contraceptives [1,2,3,4]. Treatment of patients with endometriosis causes certain difficulties, since it requires an integrated approach that consists in relieving pain, restoring reproductive function and correction of neuropsychiatric disorders. With the introduction of the practice of combined estrogen-gestagen drugs have opened new possibilities in the conservative treatment of endometriosis. Hormone therapy is the pathogenetic treatment of genital endometriosis, since it is based on the ability of drugs to suppress the activity of the hypothalamic-pituitary-ovarian system and induce atrophic changes in the tissues of endometrioid heterotopias [5, 6]. The main clinical differences between modern contraceptives due to the properties of progestogens, part of them. The mechanism of action consists in the suppression of pituitary gonadotrophic function with subsequent inhibition of the synthesis of steroids in the ovaries and the proliferative processes in the endometrium and endometrioid heterotopia.

Objective
Assessment the efficacy of treatment of endometriosis in adolescent girls combined oral estrogen-progestin preparation containing 30 mcg ethinyl estradiol and 2 mg dienogest for 6 months in a cyclic 21-day mode.

Methods
We examined 52 adolescent girls with endometriosis who were examined, including medical history, recto-abdominal observe, MRI to determine the level of hormones FSH, LH, estradiol, progesterone, prolactin, testosterone in blood serum. Recto-abdominal study was conducted before menstruation 52 girls. MRI was performed 52 girls on the tomograph «HITACHI AIRIS II» capacity of 0.3 T (Japan). Laparoscopy was performed 24 girls in the first phase of the menstrual cycle with the use of laparoscopic equipment («Storz» German). Hormonal methods of research carried out by enzyme immunoassay using the "Picon" (Russia) 52 girls with endometriosis performed determination of the concentrations of hormones.
FSH, LH, prolactin, estradiol, progesterone, testosterone, cortisol levels in blood serum at 5-7 days of the menstrual cycle. The results of the statistical calculation were exported to an Excel spreadsheet package Microsoft office.

Patients 52 adolescent girls with endometriosis

Interventions All 52 girls, with 24 of them underwent surgery for endometriosis, the drug was taken, "Janine" - combined oral estrogen-progestin preparation containing 30 mcg ethinyl estradiol and 2 mg dienogest, for 6 months in a cyclic 21-day mode.

Main Outcome Measures Reduce of dysmenorrhea, anti-androgenic effect of the drug and side effects of the drug.

Results

At the surveyed girls infringements of menstrual function by type of dysmenorrhea, dysmenorrhea combined with menorrhagia. Dysmenorrhea occurred in 36 girls (69.2% ± 6.4), dysmenorrhea combined with menorrhagia - in 16 (30.8% ± 6.4) girls. In recto-abdominal observe revealed an increase in the size of the uterus in 40.4% ± 6.8 (21) and tumor formation in the uterus - in 48.1% ± 6.9 (25), tumor formation in the uterus in the combined with the increasing size of the uterus - in 11.5% ± 4.4 (6) patients. As a result of MRI in 40.4% ± 6.8 (21) of cases diagnosed adenomyosis, in 48.1% ± 6.9 (25) - endometrioid cyst, and in 16 cases in diameter and 3.0 cm in diameter in 9 cases and 5.0 cm, 11.5% ± 4.4 (6) cases - a combination of adenomyosis with endometriosis cyst diameter and 5.0 cm. And of 27 cases of adenomyosis in 17 (62.9% ± 9.3) was determined by observation of the site with a low intensity signal in the MR-back of the myometrium in diameter and 1.0 cm in 6 (22.2% ± 8.0) observations in the posterior wall of the uterus determined by the focal thickening of the basal layer of the endometrium measuring about 0.8 x 1.0 cm in 4 (14.8% ± 6.8) observations revealed diffuse form of adenomyosis, characterized by irregular thickening of the basal layer of the endometrium and an increase in the size of the uterus. Study of indicators of hormonal studies revealed that the average prolactin was within normal limits and was 261.91 ± 13.4 mIU / ml. The median testosterone was increased to $ 3.12 ± 0.16 nmol / l. Average of FSH and LH were also increased and amounted to 7.10 ± 0.24 mIU / ml and 4.03 ± 0.31 mIU / ml respectively. Average of estradiol and progesterone were increased and amounted to 127.04 ± 3.69 pg / ml and 16.45 ± 0.25 nmol / l, respectively.

Indications for laparoscopy were progressive dysmenorrhea in 9 (37.5%) cases, the presence of endometriotic cysts with a diameter 5.0 cm in 9 (37.5%) cases, 6 (25.0%) cases, the presence of endometriotic cysts with a diameter of up to 3 , 0 cm, combined with adenomyosis. Moreover, in 9 (37.5%) cases were observed cyst size to 5.0 cm in diameter, 6 (25.0%) cases - endometrioid cyst diameter and 3.0 cm in combination with focal adenomyosis, 9 (37.5%) cases, adenomyosis in conjunction with endometriosis of the peritoneum. In 87.0% (21) cases showed signs of adhesions. In 9 cases (37.5%) were unilateral endometriotic cyst diameter and 5.0 cm thick capsule. In 6 (25.0%) cases a combination of one-sided endometriotic cysts with a diameter up to 3.0 cm with focal adenomyosis localized to the posterior surface of the uterus, in the bottom of the uterus. The contents of cysts ranged from the "chocolate" to serous-hemorrhagic. In 9 (37.5%) cases revealed endometriosis, localized to the posterior surface of the uterus, in the uterus, the peritoneum. The diagnosis of endometriosis all operated girls was confirmed histologically.

Progestogen dienogest is part of the preparation "Janine", containing 30 mcg ethinyl estradiol and 2 mg dienogest, has the properties of the derivatives of both progesterone and norsteroids. Dienogest - progestogen structurally related 19-nortestosterone, which has anti-androgenic activity, almost no effect on lipid metabolism. As a derivative of progesterone, has a weak and strong antigonadotropyn peripheral action, manifested in the suppression of estradiol secretion by the ovaries are anti-androgenic effect, realized through the reduction of total testosterone and free testosterone. As a result, research on the efficacy and acceptability of dienogest revealed its promising application for endometriosis, especially in young patients. The results of laparoscopy, performed after 6 months of drug treatment, showed complete regression of endometrioid heterotopias almost 85% of patients [7,8]. After drug treatment, "Janine," the majority of patients with endometriosis is marked reduction in the incidence of
dysmenorrhea, mastalgia, manifestations of hyperandrogenia (reduced greasiness of hair and improves skin condition) [8,9]. Relapses were observed in 7.7% of women within 6 months after treatment, the number of side effects (nausea, headaches, depression) was 10.5%, revealed no significant changes in blood pressure, body weight, liver enzymes, lipid profile [7,9].

According to the results of our study when using the drug, "Janine" for all juvenile age girls diagnosed with endometriosis showed a reduction in the severity of dysmenorrhea, menorrhagia. Repeated MRI observed a decrease in uterine size, normalization of the structure of the endometrium and myometrium with adenomyosis, reducing the size of the ovaries. Coagulation is carried out endometriosis during laparoscopy shows the high effectiveness of the therapy, both as an independent method, as well as relapse of postoperative therapy.

Dysmenorrhea prior to treatment occurred in 36 girls (69.2% ± 6.4), and in 17 operated and 19 non-operated girls, dysmenorrhea, combined with menorrhagia - in 16 (30.1% ± 6.4) girls, and in 7 operated and 9 non-operated. After treatment, the reduction in the severity of dysmenorrhea noted in 46 (88.5%) cases, and in 52.2% (24) non-operated girls, in 47.8% (22) operated on the girl child. Menorrhagia after treatment decreased in 9 (56.3%) cases, and operated in 4 (44.4%) and 5 (55.6%) non-operated girls.

In 38 girls who had a complaints before the treatment showed improvement of skin condition (decrease greasiness of the skin and hair). Also, after the treatment showed a decrease in testosterone levels in 22 (91.6%) cases out of 24. Reduced levels of FSH, LH, estradiol, progesterone in serum was observed in all 34 cases.

A side effect of the therapy were nausea (5-9,6%), heartburn (3-5,8%). Thus, the use of the drug, "Janine", containing dienogest was quite effective with minimal side effects, accompanied by a decrease in clinical symptoms of endometriosis, the normalization of hormone levels in serum.

Conclusions
Thus, as a result of the study show the high efficacy of the drug "Janine" in the treatment of endometriosis in adolescent girls, characterized by a decrease in pain, anti-androgenic effect of the drug, which helped to improve the quality of life of patients with a minimum frequency of side effects. As a result of treatment on MRI had a tendency to decrease the size of endometrioid heterotopias.

References
5. A. Adamian L., Kulakov VI, Andreev, EN Endometriosis. Medicine, 2006; 416.