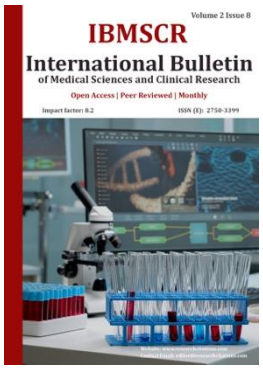

OPTIMIZATION OF CONSERVATIVE TREATMENT OF REVIVING UTERINE BLEEDING OF PUBERTY.

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https://doi.org/10.5281/zenodo.10468130

Summary: The article deals with the optimization of conservative therapy of uterine bleeding in adolescent girls, the expansion of the possibilities of anti-relapse outcomes. Objective: optimization of conservative tactics of management of adolescent girls with recurrent uterine bleeding Material and methods: 90 adolescent girls (mean age 14.6±1.2) with recurrent uterine bleeding were examined. Research methods: traditional general clinical, hormonal, ultrasound. Results: The premorbid background was analyzed in detail and risk factors for the occurrence and recurrence of uterine bleeding of puberty were determined, with an emphasis on burdened reproductive heredity on the maternal side. A pathogenetic approach to the treatment of recurrent uterine bleeding in adolescent girls is proposed. Conclusions: a differentiated and step-by-step integrated approach to the conservative treatment of uterine bleeding in adolescent girls is needed.

Key words: uterine bleeding of puberty, recurrent bleeding, premorbid background, tranexamic acid, vitamin-mineral complex.

Menstrual disorders in adolescent girls, in particular abnormal uterine bleeding during puberty (AMCPP), subsequently have a significant impact on the reproductive health of a woman of fertile age. The frequency of AMCPP ranges from 19% to 38%, relapses are 44% and have no tendency to decrease. The main reason for their occurrence is the immaturity of the reproductive system of a teenage girl. A burdened premorbid background in combination with the lability of neuroendocrine regulation of menstrual function is a trigger point in the pathogenesis of AMCPP (2, 5, 6).

The multifactorial etiological causes contributing to the occurrence of AMCPP are diverse: bacterial and viral infections, hypovitaminosis, disorders in the hemostasis system. Acting on the body of a teenage girl during hormonal adjustment, these factors (individually or jointly) eventually lead to a violation of estrogen metabolism, dishormonosis, and the appearance of a state of relative and/or absolute hyperestrogenemia.(1,3, 4).

In connection with the above, an integrated multi-system approach to the treatment of AMKPP is advisable and pathogenetically justified. At the same time, the numerous methods of treatment available today for adolescent girls with AMCPP are imperfect, as evidenced by the high frequency of their relapses (up to 44%). Therefore, the search by clinicians for optimal treatment methods for adolescent girls suffering from AMC continues.

The purpose of our study was to optimize the management tactics of adolescent girls with RAMKPP.

Research materials and methods.

We examined 90 adolescent girls with AMCPP aged 13-16 years who were not sexually active for the period 2022-2023 (average age 14.6±1.2). For the first time, the disease (AMCPP) occurred in 60% of the examined adolescent girls, and relapses were noted in 40% of cases. In accordance with the intended purpose of the study, the examined adolescent girls were divided into two comparative groups: group 1 - primary AMKPP (n= 45), group 2 – relapses of RAMKPP (n=45). The control group consisted of teenage girls with a normal menstrual cycle (n=20). The criteria for inclusion in the study and exclusion from it corresponded to those generally accepted in gynecological practice for pubertal uterine bleeding. All studies were conducted taking into account the requirements of the Helsinki Declaration of the World Association "Ethical Principles of Scientific and Medical Research with human participation", regulatory documents of the Ministry of Health, in accordance with the principles of evidence-based medicine.

To identify the risk factors for the occurrence of AMCPP that contribute to the occurrence of RAMCPP, we conducted a detailed comparative analysis of the premorbid background (PF) of the examined patients, since the somatic health of the child affects the formation of the reproductive system in the future. The greatest burden of the premorbid background with gastrointestinal diseases was noted in 70% of the examined patients of group P, anemia of 1-2 degrees (57%), thyroid pathology (46%), chronic tonsillitis and frequent acute respiratory infections (36%), hypovitaminosis (especially B vitamins) - 49%. In patients of group 1, PF was less burdened with the above-mentioned somatic diseases (up to 31%).

The study of gynecological morbidity among the examined patients revealed inflammatory diseases of the genitals (vulvovaginitis, adnexitis) up to 70% in patients of the 2nd group, 36% in patients of the 1st group. Bacteriological examination of vaginal secretions revealed a monoexcitator only in 10%, in the remaining 90% of cases an association of microorganisms with a predominance of chlamydia-fungal-coccal (aerobic-anaerobic) flora was found. Blood biochemistry revealed anemia of 1-2 degrees in 57% of the examined patients.

Heredity turned out to be burdened by various gynecological diseases of mothers (fibroids, cysts, DMK, infertility) also mainly in patients of the 2nd group (62%), while in patients of the 1st this indicator was 17%.

The premorbid background in the examined patients turned out to be polymorbid, and therefore we chose a differential approach to treatment.

Results: The general condition of the thematic patients was assessed as satisfactory, taking into account the objective status of hemodynamic parameters. Group 1 patients (n= 45) received hemostatic therapy with traditionally sex steroid hormones (COCs) initially to stop bleeding, then to normalize the menstrual cycle in a cyclic regime of 3-6 months (ethinyl estradiol 30mcg + desogestrel 0.75 mcg). The starting dose of hemostasis depended on the abundance and duration of bleeding, the weight of the patient, ranging from 2 to 4 tablets, followed by a cyclic transition. The polymorbidity of the background dictated the need to consult related specialists (neurologist, endocrinologist), whose recommendations were taken into account when choosing an adequate management tactic, while correcting the identified disorders. Positive dynamics was observed at 3-4 months of treatment, with a persistent positive effect - 6-8 months.

Patients of group N (n= 45) received medications with hemostatic purpose, correcting fibrinolysis, i.e. having antifibrinolytic and anti-inflammatory activity. Also,

patients of group P, along with tranexamic acid, received a Vitamin and mineral complex (IUD), represented by a mixture of 5 biologically active components (vitamins, minerals), the interaction of which is synergistic and cofactor. The rationale for the appointment of this IUD was that the reproductive system is closely related to the microecology of nutrition, as well as the high frequency (44%) of detection of hypovitaminosis in the patients we examined. The dose of the drug was also selected individually, depending on the reduction of bleeding intensity (1-2 powders of 2 times daily for 5-7 days). Bleeding arrest was observed from the 4th-5th day after the start of treatment with a slight "smear" for 1-2 days). A persistent positive effect is noted already with the next normal menstruation. The rehabilitation period in patients of group N lasted 2-3 months without relapse, while in patients of group 1, long-term rehabilitation of 6-8 months was noted.

The clinical course correlated with laboratory parameters. The initial level of tropic hormones of the adenohypophysis in the control and main groups before the start of treatment corresponded to the reference normative values (4.73± 0.8 IU/l) ($p<.001$). However, in the main groups, the concentration of estradiol was increased to 189.6± 7.2 nmol/l, 188.9± 4.2 nmol/L, respectively, compared with the control of 179.2±7.32 nmol/L. The AMH value in the control group was 2.4±0.5ng/ml, in the main groups 1.87± 0.3 ng/ml, 1.85± 0.2ng/ml, respectively ($p< 0.001$). The concentration of testosterone in the compared groups was higher than 1.23± 0.06 nmol/l than in the control group 0.84± 0.04 nmol/L. The obtained laboratory data indicated the presence of ovarian insufficiency in the examined patients of the main groups.

The ultrasound results in the control group corresponded to the age norm. However, in all patients of the main groups, against the background of the normative size of the uterus, the M-echo was visualized on the 2-3 day of the cycle as a hyperplastic line (endometrial hyperplasia).15.2± 0.09 mm, several single follicles (1-2) with a diameter of 2-3 mm and small point follicles in the amount of 6-8 with a diameter of 1-2 mm. There were no signs of ovulation. These data indicate ovarian and uterine insolvency in patients of the main groups.

The hormonal profile indicators at the end of treatment showed positive dynamics in the levels of sex hormones: a decrease in the concentration of androgens in patients of the main groups to 0.86± 0.03 nmol/l, a decrease in the level of estradiol to reference values, respectively, compared with the control of 179.2±73.1nmol/L. There was also an alignment of AMG indicators to regulatory data.2.3± 0.3 ng/ml and 2.21± 0.22 ng/ml ($p< 0001$), respectively.

Ultrasound results after treatment in all patients of the main groups and subgroups revealed positive changes in the form of a decrease in the size of the hyperplastic endometrium - a thin line of the endometrium 5.2 ± 0.02 mm, increased echogenicity of the uterine endometrium, which indicated the appearance of full-fledged secretion; healthy early antrum follicles appeared in the ovaries in the amount of 4-5, fine grain disappeared. Visually, there are signs of a decrease in ovarian and uterine insufficiency, and the appearance of ovarian viability.

The analysis of red blood parameters revealed compensatorily elevated hemoglobin values against the background of moderate bleeding (not profuse), which is typical for puberty: hemoglobin before treatment averaged 130 g/l, after treatment – 129.05 g/l; hematocrit before treatment -38.2, after treatment – 38.1.

hemostasiogram indicators of statistically significant differences in the compared The groups did not reveal: blood clotting time before treatment, beginning 2.58 s. / end 3.45 s. after treatment, blood clotting time, beginning 2.44 s. / end 3.27 s.

In parallel with the positive dynamics in laboratory and instrumental research methods, there was an improvement in clinical symptoms, stopping uterine bleeding - the rhythm of menstruation was restored, two–phase menstrual cycle appeared (65%). No side effects were observed during the use of the vitamin and mineral complex in combination with COC.

Conclusion. Our proposed comprehensive treatment of patients with RA ICD is an effective alternative to traditional methods of treatment, since it affects the pathogenetic links of the mechanism of occurrence of AMKPP. This method of treatment is justified, since the hemostatic effect is achieved without hormonal load on immature HGH, and also contributes to the prevention of relapses. Clinical studies have shown that the effectiveness of our proposed treatment of ICD was 84%, there were no relapses, bleeding stopped by the end of the 1st week of treatment, normalization of the menstrual cycle and a persistent positive effect by the beginning of the next menstruation, which reduced the duration of treatment by three times.

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