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## **PECULIARITIES OF ACUTE CORONARY SYNDROME ON THE BACKGROUND OF CHRONIC OBSTRUCTIVE PULMONARY DISEASE**

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Coronary heart disease (CHD) is among the most frequent diseases accompanying chronic obstructive pulmonary disease (COPD). COPD in 2-3 times increases the risk of cardiovascular diseases. According to some authors, the presence of COPD can be regarded as an independent risk factor for coronary artery disease along with age, smoking, hypertension, hypercholesterinemia. Despite the large number of inheritances, data on the relationship between COPD and coronary artery disease remain controversial.

The aim of our research is to study the features of acute coronary syndrome (ACS) in patients with COPD. A retrospective analysis of 26 case histories of patients with ACS in combination with COPD who were treated in the Department for patients with acute myocardial infarction SAHI JSC "Blagoveshchensk city clinical hospital". Men – in 22 cases (84,6%) and females in 4 cases (15,4 per cent), the average age of men and women did not differ and averaged 75.4 years. The duration of COPD was 19.7 years, stable angina made up 7.2 years. Myocardial infarction (mi) with Q-wave, was diagnosed in 8 (30,8%) patients without Q-wave (mi) - in 6 (23%) cases, unstable angina in - 12 (46,2 %) patients.

In the analysis of the prevalence of concomitant diseases revealed that the most frequently encountered arterial hypertension – 20 (76,9 %) , acute cerebrovascular disease in 3(11,5%), myocardial infarction in 4 (15,4%), congestive heart failure in 18 (69,2%), hypercholesterinemia 12 (46,2%)

Among the men smoked in 19(86,4%), among women – 1 small (3,9%). Analysis of Smoking amounted to 63.5 % pack years. Overweight was observed in 13 (50%) patients. The combination of pain in the heart region and shortness of breath was observed in 20 (76,9%) patients, due to the presence of both pulmonary and cardiac components. Upon admission to the hospital for EKG sinus rhythm was registered in 15 (57,7%) patients, atrial fibrillation in 4 (15,3%) patients, arrhythmia in 7 (27%). Heart rate (HR) averaged 95.6 in 1 minute. THEY identified the Front - 6 (44,5%) , lower in 7 cases(49,2%), the circular THEY have 1 (6.1 percent). When Echo found violations of systolic function of the left ventricle was observed in 9 (33,9%) of patients.

Thus, in patients with ACS and COPD noted in the majority of cases, the combination of breathlessness and pain, tachycardia, rhythm disturbance of the heart.

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## **LEECH THERAPY IN WOMEN WITH A HISTORY OF PRIMARY OLIGOMENORRHEA**

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**Abstract** 20 patients of reproductive age with a history of primary oligomenorrhea were examined/ They were conducted the dopplemetric study of blood flow in the uterine arteries and endometrial thickness in the middle phase of secretion (main group) and 15 patients with the correct rhythm of menstruation (the control group) were studied. The study found a significant increase of the resistance index in the uterine arteries and

endometrial thickness reduction in patients of the main group compared to the control group. a core group of women received a course of hirudotherapy, after which the resistance index in the uterine arteries and endometrial thickness was not significantly different from the control group, it indicates the effectiveness of hirudotherapy.

**Key words:** primary oligomenorrhea, hirudotherapy, the effectiveness of the treatment.

Women with primary oligomenorrhea in puberty are at risk for reduced fertility. Only 78.6% of girls with primary oligomenorrhea by the end of puberty, the menstrual cycle is established. In these patients in the reproductive age there is a lack of the luteal phase of the menstrual cycle and reduced the concentration of progesterone [3].

Well-known endocrine regulation of processes of implantation of hormones of the ovary. Progesterone is necessary for pregravid transformation of the endometrium and successful implantation. Low concentration and short effect of progesterone leads to the disruption of implantation and development of the blastocyst [5].

The mechanism of action of hirudotherapy consists of the following main factors: reflex, mechanical and biological. The reflex factor is similar to the impact of reflexology, as hirudotherapy is performed according to the acupuncture points, where a high concentration of nerve endings. The mechanical factor is expressed in the discharge of the regional flow in the process of phlebotomy. The biological effect is ensured thanks to the presence in saliva of leeches of the whole range of biologically active substances [1, 2, 4].

Research objective. To study the effectiveness of hirudotherapy in patients of reproductive age with primary oligomenorrhea in puberty.

**Materials and methods** The criterion for inclusion in the main group was the absence of an independent menses, with menarche within 45 days to 6 months with normal menarche.

Before and during hirudotherapy the patient did not take the combined oral contraceptive pill.

Exclusion criteria:

- overweight, obesity;
- hyperandrogenism, confirmed by clinical and hormonal studies;
- diseases of the reproductive system (endometriosis, uterine leiomyoma, ovarian tumor, acute and exacerbation of chronic inflammatory process).

We examined 20 patients with primary oligomenorrhea in puberty (the main group) and 15 with correct menstrual rhythm (control group). All patients gave informed consent for the study.

Research methods included the collection of anamnesis, objective examination.

Ultrasound examination (ultrasound) of the uterus and dopplerometrical study of blood flow in uterine arteries at 21-22 days of the menstrual cycle (the average phase of secretion) prior to the commencement of treatment and after 2 months and after treatment on the Mindray DC-7.

Statistical methods. Processing of the data was performed using Microsoft Office Excel 2007 and statistical software package Statistica 10.0. Assessment of statistically significant differences was performed using parametric t-student test for independent samples ( $M \pm m$ ). The comparison of qualitative parameters was carried out using accurate two-way Fisher test. The differences in all cases were evaluated as statistically significant when  $p < 0.05$ .

The leech therapy was started on day 4 after the end of menstruation. The duration of treatment is 7 days.

The results of the study and discussion The average age of patients of the main group was made up  $25,54 \pm 0,3$  years, control  $24,3 \pm 0,23$  years ( $p > 0,05$ ).

The frequency of somatic diseases among patients of the main group was 75,0%, in the control group of 33,3% ( $p < 0,001$ ). More common diseases of the urinary system and diseases of the circulatory system (20,0%). The average age of menarche in patients of the main group of  $13,4 \pm 0,13$  years, control of  $12,3 \pm 0,11$  years ( $p > 0,05$ ). The duration of the menstrual cycle was greater in patients of the main group ( $28,5 \pm 0,42$  days, against  $27,25 \pm 0,23$  days;  $p < 0,01$ ). The duration of menstruation made up  $4,68 \pm 0,12$  days and  $4,71 \pm 0,12$  days;  $p > 0,05$ ).

In the structure of gynecological diseases in patients of the main group were cervical erosion (25,0%), inflammatory diseases of female pelvic organs (20,0%), female infertility associated with lack of ovulation, was observed in 5% of patients.

When dopplerometrical study of blood flow in uterine arteries was determined by a high resistance index (RI) -  $0,86 \pm 0,07$  ed. Patients in the control group RI was  $0,7 \pm 0,02$  standard ed. ( $p < 0,05$ ).

Ultrasound of the pelvic organs before the holding of hirudotherapy in the main group of women thickness of the endometrium was 2 times lower than in the control group and was  $6,67 \pm 0,76$  mm, against  $13,51 \pm 0,7$  mm ( $p < 0,05$ ).

Therefore, in women with primary oligomenorrhea in puberty was determined insufficient thickness of endometrium and the reduction of blood flow in uterine arteries.

After the course of treatment, the following results were obtained: in patients of the main group, the endometrial thickness was not significantly different from the control group and was  $11,88 \pm 1,11$  vs  $13,49 \pm 0,69$  mm. In one case the patient with primary oligomenorrhea in puberty at the end of treatment, the endometrium remained thin (8,9 mm) at baseline to 4,0 mm.

In patients of the main group during the second study of blood flow in uterine arteries, a decrease of RI to  $0,73 \pm 0,06$  ed., and it did not differ significantly from patients in the control group.

Conclusion. When holding of hirudotherapy in patients of reproductive age with primary oligomenorrhea in puberty revealed a significant decrease of resistance index in the uterine artery and increasing the thickness of the endometrium, indicating that the efficiency of hirudotherapy.

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### OUTPATIENT ANESTHESIA FOR TRANSVAGINAL PARACENTESIS OF OVARY

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**Introduction** Outpatient interventions despite the simplicity and short duration are still complex and require the utmost care and commitment to prevention and early intensive therapy of possible complications. Transvaginal paracentesis of ovary (TPO), carried out with the purpose of oocyte retrieval for in vitro fertilization (IVF) of women, is an outpatient operation under general anesthesia, but with minimal trauma. However, the introduction of a needle into the ovaries requires surgical stage of anesthesia. Anesthesia in the outpatient setting with many advantages has drawbacks. The complication of using general anesthesia in the outpatient setting is that none of the common anesthetics (inhalation and not inhalation) meets the requirements for anesthesia in the outpatient setting and for individual differences in ambulatory patients.

**The objective of the work.** Carrying out analysis of anesthetic supports for TPO. Identifying the degree of safety of outpatient anesthesia during these procedures and ways to improve it.

**Material and methods.** In 2013-2016, 260 anesthetic cares were held when performing paracentesis of ovary for the purpose of oocyte retrieval for in vitro fertilization. All women were prepared in pre-anesthesia period in general accepted scheme of an outpatient. For security purposes, in the initial inspection and selection for ambulatory anesthesia, the anesthesiologist must assess the status of the patient; determine the degree of anesthetic risk. To speed up this task it was suggested to the patient to fill out a survey card developed by the outpatient. Along with an informed consent to general anesthesia, it will greatly reduce the risk of anesthesia care and will protect from errors of the anesthesiologist. As a rule, all women were 28-42 years old, had complicated reproductive histories, have had 3-5 general anesthetic cares. They did not have any serious body diseases; all patients had uncomplicated allergic anamnesis. Anesthesia without premedication was performed with propofol against constant oxygen therapy with FiO<sub>2</sub> 30-40%. Operations were carried out in the deployed operation room equipped and prepared according to generally accepted requirements. Controllability of anesthesia was assessed by time: 1. from the start of injection of propofol until loss of consciousness; 2. from the moment of cessation of administering hypnotics before opening eyes; 3. from the moment of cessation of administering hypnotics prior to the execution of commands. According to these stages indications of hemodynamics and respiration were studied.

**Outcomes.** Induction time was 1-1.5 minutes later propofol was bolus administered 30-20 mg, at that they observed decreased blood pressure by 10-15% of baseline, heart rate fell at 15-18 per minute. Total doses to surgery were 300-550 mg. Hemodynamic parameters during anesthesia operations were rather stable, but blood pressure was in close relationship to the rate of administering propofol (previve). Spontaneous breathing on the background of constant oxygen therapy 2-3 l / minute did not suffer. The oxygen saturation was at 100-99%. The duration of surgery was within 17 to 22 minutes. The patients woke up for 3-5 minutes with no signs of amnesia. Within 2 hours after anesthetic care women were observed in the post anesthetic chamber,