

which may have important implications for health care systems, physical education and sports, mountaineering, flights to the stratosphere and space, and creation of new areas of production in the field of Instrument Engineering, such as the release of bioeffective pulse-frequency generators based on quantum wave properties of nerve cells.

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ESTIMATION OF RISK FACTORS OF RESTENOSIS AFTER CORONARY REVASCULARISATION

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Coronary heart disease continues to take the leading position in the world as the cause of death and early disablement of persons able to work, in spite of active introduction of modern methods of diagnostics and treatment.

Now a days in the treatment of coronary heart disease actual problem is both surgical and endovascular revascularization. Stents introduction with drug covering allows to show the priority of endovascular surgery in the choice of the methods of the coronary artery passage restoration.

In spite of the endovascular surgery progress high percents of complication stays after percutaneous coronary angioplasty.

The most often restenose of coronary arteries is takes place, which according to the statistics is developed during first 6 month after percutaneous coronary angioplasty in 20–40% of patients [1–3], and in complicated injuries of coronary arteries it reaches 60% [4].

The aim of the research: the estimation of coagulative factors influence and factors of inflammation on the risk elevation of restenosis.

Materials and methods of the research.

100 males of Karaganda region who unevened the procedure of stenting of coronary arteries in connection with acute myocardial infarction were examined.

Questionnaire of the patients was made paying attention to finding of risk factors of coronary heart disease: smoking, arterial hypertension and hereditary factors of cardiovascular pathology. Biochemical findings of lipid specter, coagulogramms, C-reactive protein and changing of thrombocyte level were estimated.

All the patients were divided to two groups: 50 persons each. The 1st group consisted the patients with restenosis of coronary arteries determined by coronarography during 1 year after stenting in connection with the repeated episode of acute coronary syndrome; the 2nd group consisted with the patients without the signs of restenosis.

Results of research and their discussion. According to the questionnaire it was determined, that in the 1st group there were 44% of smokers, but in the 2nd group the factor of smoking was only in 17%. Hereditary factors to coronary heart disease was higher in the 1st group (64%) in comparison with the 2nd group (50%). Special attention was paid to that the arterial hypertension was more often in the 1st group too (64%).

The signs of hypercoagulation were seen in 36% in the 1st group, but in the 2nd group there were only 20% of cases. Moderate level of thrombocytosis

was seen in each 2nd patients of the 1st group and in each 4th patients of the 2nd group.

It necessary to mark that in the 1st group in 100% of patients the elevation of C-reactive protein was registrated. At the same time in the 2nd group no one case with signs of inflammatory syndrome were marked by clinical and laboratory examinations.

Conclusions

1. Clinico-biochemical prognostic factor of possible development of restenosis of coronary arteries may be the elevation of C-reactive protein, hypercholesterinemia, hypertriglyceridemia, hyperlipoproteinemia and inclination to hypercoagulation.

2. The elevation of thrombocyte level may also be possible factor, as intervention of thrombocyte aggregation, including stenting zone.

3. Marked clinical and laboratory damages are to be seen as indications for making of coronarography for the diagnosis of possible restenosing.

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LUNGS FUNCTION BY THE OPIUM INTOXICATION

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The research aims. Assessments of the lung function at opium consumers depending on intoxication duration.

Material and research methods. There are observed 70 narcomaniacs consuming opium daily in a number of 2,0–3,0 grams. Middle age of opium narcomans was 26,5 years old. Depending on the narcotic consumption, duration the observed patients are distributed in two groups: I – 2–3 years lasting of intoxication, II – a narcotization within the 4–5 and more years. The control group was 20 almost healthy men comparable on age. By the assessment of the lung function condition of the observed patients defined the following indicators: vital capacity (VC), forced vital capacity (FVC), forced exhalation volume for 1 Sec. (FEV1), Tiffno's index (FEV1/FVC), the maximum exhalation

volume rates at the lung volumes 25, 50 and 75% of FVC (MEF25, MEF50, MEF75), average maximum expiratory flow at the lung capacities from 25 to 75% of FVC, the peak expiratory flow (PEF). The lung function researched conducted on the spirometry computer «Pneumos 300» of Car-diette firm (Italy).

Research results. By the lung function analysis of the I group changes from pulmonary volumes and capacities it isn't found. So, VC in the I group was $98,4 \pm 1,91\%$, FVC – $102,35 \pm 2,10\%$ that significantly didn't differ from the control group measurements ($99,6 \pm 3,71\%$ and $103,1 \pm 2,79\%$). Air flow studying on a bronchial tree allowed to note that in the I group FEV1 decreased in 7,2%, and Tiffno's index – at 8,6%. More significant deviations were outlined from MEF and MMEF reflecting of a bronchial tree proximal and distal departments permeability condition.

So, in the I group is noted the MEF25 and MEF50 decrease on 12,8% and 10,1% ($p < 0,05$) though MEF75 decrease (on 5%) didn't differ from control measurement. MMEF25-75 were 9,2% lower, than at almost healthy ($p < 0,05$). PEF also decreased to 14% ($p < 0,05$). When testing with berotec for identification of respiration mechanics disturbance by bronchi smooth muscles fibers tonus increase of 69.2% of the I group persons tests was positive and at the other – negative. In other words, in most of the cases the obstruction was reversible.

The lung function analysis in the II group testifies about the progression of pulmonary ventilation disturbances. So, high-speed indicators are authentically lowered: OFV1 on 16,1%, Tiffno's index – on 15,1%. The bronchial permeability disturbances, mainly central respiratory tracts are confirmed by more expressed decrease of MEF25 ($77,5 \pm 2,48\%$) in the II group in comparison with a similar indicator in the I group ($102,9 \pm 4,73$). PEF decreases to $81,4 \pm 2,30\%$ (also to $84,7 \pm 3,02\%$ in the I group). The special attention is drawn to the dynamic characteristics decrease at the level of distal bronchi, making 11,3% for MEF75 ($p < 0,05$) and 16,1% for MEF50 ($p < 0,001$). At more long opium intoxication MMEF25-75 decreases by 9,5% also. The VC and FVC in the II group tended to decrease, however the difference from comparing groups was not reliable. At observed patients of the II groups 47,7% a pharmacological test was positive, at 50% – negative, at 1 patient – paradoxical.

Thus, in process of opium intoxication duration augmentation high-speed indicators of air flow on a bronchial tree are aggravated. The obstruction of the periphery respiratory tracts recorded the express progressing decrease of MEF50 and MEF75. With the augmentation of intoxication term the reversible component of bronchial obstruction decreases. The diagnosed rejections of high-speed characteristics of air flow a bronchial tree can be surveyed as an early (preclinical) stage of chronic obstructive