## Rusnak I. T., Volynska M. V. INFLUENCE OF PHYSICAL ACTIVITY ON THE PATHOLOGY OF CARDIOVASCULAR SYSTEM

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Physical activity helps to prevent heart attacks and cardiovascular system diseases. The results of all available researches demonstrate that regular exercises in moderate amount are, perhaps, the most effective preventive measure of heart diseases and their complications.

A patient with 80-90% occlusion of right coronary artery has been observed. After a year of regular trainings in aerobics a lot of collaterals appeared in the organism, making blood flow to certain parts of his body easier.

In other forty-year-old male patient, angiogram showed partial occlusion of coronary arteries. The occlusion was accompanied by chest pain. The coronary artery bypass grafting was not advised to the man, he had to use conservative method of treatment first. He agreed to regulate daily water intake and to begin with two glasses of water (0,5 l) exactly half an hour before meal. He was also recommended one hour walks in the morning and in the evening (20-30 minutes at the beginning, gradually increasing the time up to an hour). The outcome of the research has demonstrated that fat-burning enzymes, sensitive to hormones are activated after the first hour of walk and remain active for 12 hours. Thus, having walks twice a day, a patient activates fat-burning enzyme and accumulative effect of its activity is achieved. After three months of exercises this man addressed to one of the known medical centers in Houston for the final examination in order to make a decision about grafting. His new angiogram didn't show any signs of previous blood vessel occlusion. He didn't need surgery anymore.

The results of a large-scale eight year investigation of more than 84 thousand of nurses are significant. In those who regularly did complex of physical exercises, the risk of heart attack or stroke was 54% less, compared to those women, who had sedentary lifestyle.

In case of coronary artery diseases regular exercises help the body to form more auxiliary arteries through which the blood can flow around the body and bypass occluded blood vessels.