

ABSTRACT

Ischemic disease of the lower limb is classified as a cardiovascular disease. Although cardiovascular diseases are easily preventable, they are the most common cause of death in the European Union, where they count almost half of the total mortality. Cardiovascular diseases are also common cause of many other life complication such as immobilization, psychological problems and others. This group of diseases also puts a significant burden on the health system and a financing of a healthcare, as they are relatively frequent and costly diseases.

The objective of this thesis is to find out whether five months of exercise has an effect on a prolonging the claudication interval in patients with ischemic disease of the lower limbs. Other objectives are to find out if the results will be seen after 2 months from the start, and if men will react differently to exercise than women.

Method: 9 patients, 5 men and 4 women in the aged from 50 to 74 years took part in the study. The patients suffered from ischemic disease of the lower limbs II b (according to Fontain). These were also patients from the vascular clinic at the Vysočanská Polyclinic. I had total of 6 individual sessions with each patient, in each of which I did approximately thirty minutes of therapy with the patient, and afterwards we measured the claudication interval.

Results: Based on the results of a Wilcoxon paired test, it was found that five months of exercise does really has a significant effect on the prolonging claudication interval by an average of over 75% (p value – 0,002). Despite not reaching value of improvement by average of 20% after two months of exercise. There was an upward trend in prolonging claudication interval since the very beginning. Furthermore, men responded better to therapy (p value – 0,031) than women (p value – 0,063). Meaning that men had slightly better results at prolonging claudication interval in the end of a therapy than women.

Conclusion: There was a significant effect of an exercise on prolonging claudication interval. Therefore it is suitable, non-invasive, non-pharmacological therapy for patients suffering from ischemic disease of the lower limbs.

Key words: Ischemic disease of the lower limbs, claudication interval, atherosclerosis