

Abstract

Charles University

Faculty of Pharmacy in Hradec Králové

Department of Pharmacology and Toxicology

Student: Jan Juhász

Supervisor: Prof. MUDr. Radomír Hrdina, CSc.

Title of diploma thesis: Treatment of lower extremity peripheral artery disease

The lower extremities ischemia is a disease caused most often by atherosclerosis during which the lumen in lower limb arteries becomes narrow. Its prevalence is increasing, especially in the developed countries. The disease can be asymptomatic and symptomatic. The symptoms are very unpleasant and decrease patient's quality of life. Advanced stages of the disease may be life threatening. Therefore, it is vital to timely and correctly diagnose the illness. During the therapy, it is possible to use pharmacological as well as non-pharmacological procedures, and, preferably, a combination of the two types of treatment. The pharmacotherapy can be divided into several parts. The prevention of atherosclerotic complications makes use of preventive measures and antiplatelet therapy to reduce the cardiovascular risk. The symptoms therapy focuses on improving patients' quality of life by prescribing the vasoactive medications cilostazol, naftidrofuryl or pentoxifylin. The critical limb ischemia therapy uses prostaglandin analogues alprostadil, iloprost, limaprost or prostacyclin and, at the same time, antibiotics during bacterial infection complications. The pharmacotherapy also concentrates on the risk factors of atherosclerosis, which, besides lifestyle changes, primarily include cessation of smoking, therapy of arterial hypertension, diabetes mellitus and dyslipidemia. The choice of medicaments depends on the severity of the illness, possible interactions, patient's attitude, tolerance and other criteria. The non-pharmacological procedures comprise regular exercise and revascularization procedures including endovascular treatment, surgical treatment and their combination.