

63. SURGICAL TREATMENT FOR CHRONIC POSTEMBOLIC OCCLUSION OF THE FEMOROPOPLITEAL ARTERIES

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Introduction. Acute limb ischemia (ALI) is a condition that threatens not only the affected extremities but even the patient's life and therefore requires prompt intervention. The embolism is listed among the main causes of ALI, while emergency open surgical thromboembolectomy is still the standard approach to prevent limb loss. However, some patients tolerate the episode of ALI and are hospitalized afterwards (>14 days from onset) with symptoms of chronic limb ischemia.

Aim of study. The aim of our study was to evaluate the outcomes of surgical management in cases of chronic limb ischemia caused by embolic occlusion of the femoropopliteal arteries.

Methods and materials. The study was conducted at the Vascular Surgery Clinic, Institute of Emergency Medicine (Chisinau, Republic of Moldova), and included patients hospitalized between July 2019 and January 2022. A case series comprises 19 patients; aged between 38 and 88 years, median – 70 (25%-75% IQR 63-78) years. There were 10 (52.63%) men and 9 (47.36%) female patients; the left lower limb was affected in 13 (68.42%) cases. All patients noticed an acute onset of ischemic symptoms 15 to 182 days before admission, median – 20 (25%-75% IQR 15-30) days; while medical history did not reveal pre-existing peripheral arterial disease. Paroxysmal (n=9) or tachysystole (n=10) forms of atrial fibrillation have been diagnosed in all cases. In accordance with Fontaine classification of chronic limb ischemia there were 4 (21.05%) cases suitable for stage II, 12 (63.15%) limbs with stage III and other 3 (15.78%) – with stage IV. Isolated occlusion of femoropopliteal arteries along with absence of additional significant lesions suggestive for peripheral arterial disease has been confirmed by imaging: computed tomography angiography (n=9), duplex ultrasound (n=9) and digital subtraction angiography (n=5).

Results. All patients underwent surgical treatment, either under spinal (n=17) or general (n=2) anesthesia. Open thromboembolectomy was performed in 16 (84.21%) cases, in two patients being completed with vein patch angioplasty. In 2 (10.52%) cases distal femoropopliteal bypass with autologous vein was required, and in one (5.26%) patient vein graft interposition at the popliteal level was practiced. In 3 patients who underwent thromboembolectomy early reocclusion of femoropopliteal arteries was diagnosed. Restoration of blood flow was achieved through reconstructive vascular surgery: femoropopliteal/tibial bypass (n=2) or graft interposition (n=1). During the study period no cases of postoperative mortality were recorded, while the rate of major limb amputations was 10.52% (2 cases).

Conclusion. Open thromboembolectomy provides clinically acceptable results in patients with chronic postembolic occlusion of the femoropopliteal arteries. In cases of technical failure or early vessel reocclusion, reconstructive vascular operations remain a reliable option for restoring the arterial patency.