26. REVASCULARIZATION OF THE LOWER EXTREMITIES USING TRANSOBTURATOR BYPASSES

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Introduction. Transobturator bypass is a surgical technique used as an alternative option for lower extremity revascularization. The passage of the vascular graft through the obturator foramen, thus bypassing the inguinal region, is a suitable option for patients who cannot safely benefit from an arterial bypass with an anatomic route of the conduit (previous vascular surgery, graft infections or inflammation in the groin area, tumors with metastases in the regional lymph nodes, pseudoaneurysms). The purpose of the current study was to identify the clinical circumstances in which revascularization of the lower limbs were performed through transobturator bypass and to assess early postoperative results.

Case statement. The case series included three male patients operated between 2020-2022 at the Vascular Surgery Clinic, Institute of Emergency Medicine, Chisinau, Republic of Moldova. Vascular diseases were diagnosed by computed tomography angiography. The following conditions were established: (#1) traumatic injury of the left common femoral artery, (#2) pseudoaneurysm of the right common femoral artery in a drug addict and (#3) limb-threatening ischemia of the left lower extremity caused by occlusion of the native femoral artery and failure of two previous femoral popliteal bypasses (one with autologous vein and another - with PTFE graft). In first two cases opting for extra-anatomic bypass was conditioned by the infection in the groin area, and in case #3 – by the multiple postoperative scars in the infrainguinal region. The external iliac artery served as the inflow source in all cases; whereas, after passing through the obturator foramen, the venous (#1) or prosthetic (#2, #3) graft was anastomosed with the superficial femoral artery (#1, #2) or popliteal artery (#3). In the latter case, a composite bypass was applied - the dacron graft being connected to the P3 segment of the popliteal artery via an additional reversed vein fragment. The postoperative period passed without major events, except for case #2 where vacuum-assisted wound closure therapy was necessary for the management of the residual cavity after the excision of the infected pseudoaneurysm.

Discussions. Transobturator bypass is an older and less frequently used revascularization method for improving the circulation to the lower extremities.

Conclusion. Arterial bypass through the obturator foramen remain a viable technique for revascularization of the lower limbs with local (groin) risk factors, regardless of the nature of the latter.