

Advantage of peripheral angioplasty in diabetic patients with failing bypass graft or residual critical ischemia after bypass graft

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Purpose: to evaluate the efficacy of peripheral angioplasty (PTA) in the treatment of diabetic patients with previous peripheral bypass graft (BPG) and recurrent critical limb ischemia (CLI).

Methods: Between January and December 2006, 293 diabetic patients presenting with critical limb ischemia (CLI) according to the TASC 2000 criteria were admitted to our foot centre. Among these patients, 32 of them had previously undergone BPG: femoropopliteal in 26 patients, femoroposterior tibial in 3 patients, femoroperoneal in the remaining three. All these patients underwent angiography and, whenever possible, a concomitant PTA procedure. **Results:** Six patients presented with stenosis in the distal anastomosis and 2 with stenosis in the proximal anastomosis. In 5 patients the stenosis was at both the distal and proximal anastomosis. In 12 patients the bypass was completely occluded. In 7 patients the BPG appeared patent but all the arteries were occluded. The average time interval between BPG and subsequent hospital admission because of CLI was 6.3 ± 4.2 months for patients with patent BPG and 20.5 ± 12.0 months for those with failing BPG. A successful PTA was performed in 25 patients (78.1%). Five non-revascularizable patients underwent major amputation within 30 days; 3 patients, one of whom non-revascularizable and 2 revascularized, underwent amputation during the 12 -months period of follow-up. **Conclusions:** In patients with graft failure or insufficient distal run-off PTA is an effective method for revascularizing the graft obstruction, or at least one subgenicular artery, as in case of patients with inadequate run-off after femoropopliteal bypass grafting