

Distal bypass grafts in patients with critical limb ischemia with poor pedal arch

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Purpose: To evaluate the amputation-free survival and patency rates of distal bypass grafts in critical leg ischemia (CLI) in the presence of complete or incomplete pedal arch.

Methods: A retrospective analysis of all patients with CLI undergoing distal bypass between 2004 and 2009. Kaplan-Meier analysis was used to assess and compare amputation free survival and patency rates at 12 months.

Results: 122 consecutive patients (73% men and 27% women), median age 78, range 19-96. Underwent 135 distal bypasses. 73% had diabetes and 29% had renal impairment. 93% had vein conduit and 7% PTFE + Miller cuff. Seven % had Complete pedal arch (CPA), 26% dorsal pedal arch (DPA), 30% plantar pedal arch (PPA), 23% had no pedal arch (NPA), and 15% of cases could not be assessed due to inadequate images. In-hospital mortality was 2%. The amputation-free survival and patency rates at 1 year were.

	AFS	PP	PAP	SP
CPA	72%	50%	100%	100%
DPA	76%	50%	80%	80%
PPA	81%	48%	84%	92%
NPA	86%	57%	90%	90%

Conclusions: Amputation-free survival and patency rates are comparable in all groups. Complete Pedal arch had better patency rate, however this could be due to smaller number of cases.