

ArtAssist® ...the Arterial Assist Device™

CASE REPORT

Treatment of non-reconstructable PVD with the Arterial Assist Device™

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Figure 1

Before ArtAssist® Treatment

Patient

- 68 y.o. male with diabetes
- 4-month history of rest pain and progressive necrosis
- PVR's were diminished, flat wave form at toe level
- No run-off vessels towards the toe

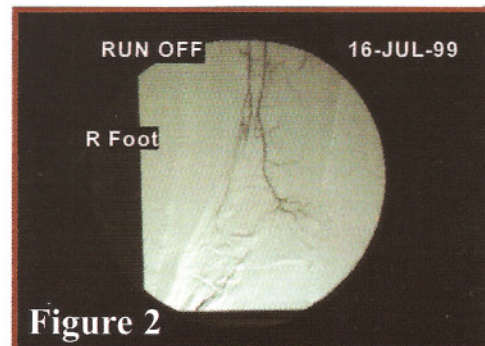


Figure 2

Arteriography

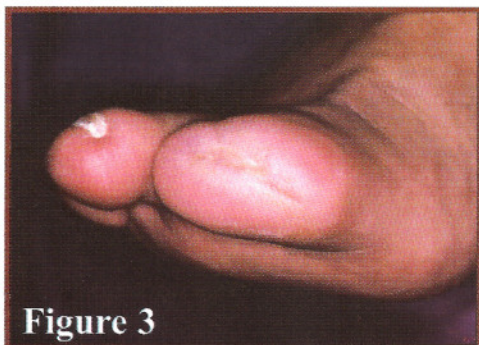


Figure 3

After 5 Months Treatment

ArtAssist® Device

- Applied intermittent compression to foot, ankle and calf at 120mmHg
- Home use, 1 hour q.i.d.
- Metatarsal PVR-amplitude increased
- Lesions are healed



ArtAssist® Device

Patient is a 68 year-old man with diabetes, post Coronary Artery Bypass Graft (CABG), Carotid Endarterectomy (CEA), bilateral femoro-popliteal bypass and bilateral profundaplasty. Patient presented with a 4-month history of rest-pain and progressive necrosis of the right hallux (figure 1). A small lesion was developing on the tip of the second toe. Non-invasive pulse-volume recording (PVR) demonstrated a diminished amplitude of 3 mm at the metatarsal level, with a flat waveform at the toe level. Arteriography demonstrated patent vessels down to the ankle, but no run-off towards the forefoot (figure 2). Patient used ArtAssist® compression for one hour, q.i.d. Topical treatment consisted of a non-adherent dressing only and minor debridements in the office. After completion of a 5-month compression protocol, the lesions are healed (figure 3). Metatarsal PVR-amplitude has increased to 9 mm. Note the tip of the second toe, which completely healed after one month.

ArtAssist® can increase skin-flow more than 4 times.^{1,2}

References:

1. van Bemmelen PS, Weiss-Olmanni J, Ricotta JJ: Rapid intermittent compression increases skin circulation in chronically ischemic legs with infra-popliteal obstruction. VASA 2000;29:47-52.
2. Eze AR, Comerota AJ, et al.: Intermittent calf and foot compression increases lower extremity blood flow. Am J Surg. 1996;172:130-135.



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