

LOWER LIMB ULCER CASE REPORT WITH SEVERE ARTERIAL AND CHRONIC VENOUS DISEASE TREATED WITH A COMBINATION OF ELECTROSTIMULATION (VEINOPLUS) AND PROSTAGLANDINS

Presented at: *European Venous Forum Workshop, Vienna 05/2011*

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Introduction: Ulcers with mixed venous and arterial components represent about 10% of cases and the more complicated the history of disease, the more difficult is the wound treatment. In affected patients, it is important to avoid compression, which is advised for pure venous ulcers. We report a case of ulcer on a complicated history of chronic venous and arterial disease treated with electrostimulation (EMS): VEINOPLUS and prostaglandins (PG).

Case presentation: We report here the case of a patient, Mr. MP, 56-years old. History: Deep venous thrombosis (DVT) in left leg 15 years ago followed by 5 further DVT; the last one 5 years ago. Every episode was treated by warfarin (1 month). In 2009 a left popliteal aneurysm was diagnosed and repaired with vein graft which closed 10 weeks later despite warfarin. Critical ischemia and intermittent claudication (IC) at 100m were managed by stenting a stenosis in left superficial femoral artery which resulted in symptoms relief.

Consultation in June 2011: Patient presented IC at 50m without rest pain and a left leg ulcer present for 2 months. He was able to sleep horizontal at night without any pain. His left Ankle Brachial Index (ABI) was 0.35.

Investigations and Treatment: The duplex scan showed an occluded popliteal vein and a partially recanalized femoral vein with marked reflux at the ilio-femoral segment. Angiography showed occluded lower femoral and popliteal arteries but with good collaterals across the knee. Prescribed treatment was for outpatient management with PG E-1 daily infusion for 2 weeks, calf pump activation by EMS: VEINOPLUS in sitting position for 3-4 hours daily without warfarin discontinuation (INR 2.7).

Outcome: After 2 months (August 2011), swelling markedly reduced, ulcer healed and IC improved to 200m with no change in ABI.

Conclusion:

Management of mixed ulcers may not include compression as critical ischemia and limb loss may occur. It is therefore important to look for alternative ways of treatment. We describe the case of a mixed lower limb ulcer treated with electro-stimulation and PG that led to rapid healing of ulcer and improvement of IC. Possible contribution of EMS for treatment of leg wounds from both origins and the mechanisms underlying this action are worth further investigation.

Key words: mixed ulcer – electrostimulation

Published in *Annals of Vascular Surgery* 2015 (article in press)