Int Angiol. 2015 Jun;34(3):243-9. Epub 2014 Jun 19.

Endovenous treatment of incompetent anterior accessory saphenous veins with a 1540 nm diode laser.

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Abstract

AIM:
Endovenous laser treatment (EVLT) is an accepted form of axial vein ablation for symptomatic venous reflux but its role in the treatment of anterior accessory saphenous vein (AASV) has not been well characterized. The aim of this paper is to show the short-term result of EVLT with a ball-tipped fiber and a 1540 nm diode laser of the AASV with preservation of a competent great saphenous vein (GSV).

METHODS:
Nine incompetent AASV veins in 8 patients (6 female) were treated. The gravity of chronic venous disease was determined according to the CEAP classification and the severity of symptoms was scored according to the revised Venous Clinical Severity Score. Patient satisfaction was assessed by a 0 to 3 scale.

RESULTS:
The average linear endovenous energy density was 60.5 J/cm vein (SD: 7.5). Patients returned to daily activities after a mean of 3.8 days (SD: 1.4). 5 patients (63%) have had pain but of mild intensity. No patients developed paresthesia or phlebitis reactions in the treated area. Post-operative ecchymoses are frequent (89%). During the follow-up period (mean 13 months, range: 7-17 months) all the veins were occluded. The VCSS improved drastically from a mean of 3.2 (SD: 1.3) preinterventional to 0 (SD: 0.38) at 17 months. All patients were satisfied or very satisfied with the method. No severe complications occurred.

CONCLUSION:
EVLT of an incompetent AASV with a 1540 nm diode laser is a safe and efficient therapy option, with a high success rate and with no evidence of GSV neo-reflux or recurrent varicosities during the follow-up period.