RECENT ADVANCES IN THE MANAGEMENT OF PRIMARY VARICOSE VEINS

Essay

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List of Contents

Title Page No.

List of Tables

List of Figures

List of Figures (Cont.)

List of Figures (Cont.)

List of Figures (Cont.)

List of Abbreviations

Abb.	Full term
AAGSV	Anterior accessory great saphenous vein
AASV	Anterior accessory saphenous vein
ASVAL	Ambulatory varices ablation under local anaesthesia
AV	Arterio-venous
AVL	Anterior vein of the leg
AVP	Posterior arch vein
CAC	Cyanoacrylate closure
CAG	Cyanoacrylate glue
CE	Cranial extension
CEAP	Clinical, Etiological, Anatomical and Pathological classification
CFV	Common femoral vein
CHIVA	Cure conservatrice et hemodynamique de l'insuffisance veinesuse en ambulatoire (French acronym)
CT	Computed tomography
CTV	Computed tomography venography
CVD	Chronic venous disorders
CVI	Chronic venous insufficiency
DE	Dorsal extension
DSS	Double syringe system
DVT	Deep venous thrombosis
ECM	Extracellular matrix
EHIT	Endovenous heat induced thrombus

List of Abbreviations (Cont.)

Abb.	Full term
EPA	External pudendal artery
EVLA	Endovenous laser ablation
EVSA	Andovenous steam ablation
FS	Foam sclerotherapy
FV	Femoral vein
GAG	Glycosaminoglycan
GSV	Great saphenous vein
HHD	Hand held Doppler
HL/S	High ligation and stripping
IG	Intergemellar
IPC	Intermittent pneumatic compression
IPL	Intense pulse light
IUP	International union of phlebology
IVC	Inferior vena cava
IVUS	Intravascular ultrasound
KTS	Klippel Trenaunay syndrome
LPT	Lower paratibial
MF	Muscular fascia
MG	Medial gastrocnemial
MMPs	Matrix Metalloproteinases
MOCA	Mechanochemical ablation
MRV	Magnetic resonance venography
NTNT	Non-thermal non-tumescent

List of Abbreviations (Cont.)

Abb.	Full term
PA	Para achilean
PAGSV	Posterior accessory great saphenous vein
PAV	Posterior arch vein
PE	Pulmonary embolism
PEP	Post exercise pressure
PF	Popliteal fossa
PIN	Perforation invagination stripping
PLT	Posterior lateral thigh
PPG	Photoplethysmography
PT	Posterior tibial
PV	Popliteal vein
PVs	Perforator veins
RBCs	Red blood cells
RFA	Radiofrequency ablation
RFITT	Radiofrequency induced thermotherapy
SEPS	Subfascial endoscopic perforator surgery
SF	Saphenofemoral
SFJ	Saphenofemoral junction
SMC	Smooth muscle cell
SP	saphenopopliteal
SPJ	Saphenopopliteal junction
SSV	Small saphenous vein
STD	Sodium tetradecyl sulfate

List of Abbreviations (Cont.)

Abb.	Full term
SVT	Superficial vein thrombosis
TA	Tumescent anesthesia
TIA	Transient ischemic attacks
TIMPs	Tissue inhibitor of metalloproteinase
TIPP	Transilluminated powered phlebectomy
TV	Terminal valve
UGS	Ultrasound guided sclerotherapy
US	Ultrasound
US-FDA	US-Food and Drug administration
USFS	Ultrasound guided foam sclerotherapy
USGFS	Ultrasound guided foam sclerotherapy
VBOD	V-Block occlusive system
VCSS	Venous clinical severity score
VHL	Von Hippel Lindau gene
VVs	Varicose veins

INTRODUCTION

Varicose veins are tortuous, widened veins in the subcutaneous tissues of the legs and are often easily visible ***(Campbell, 2006).***

Varicose veins of the legs affect approximately 25% of the population and may have a substantial impact on patient's health-related quality of life ***(Biemans et al., 2013).***

The word 'varicose' is derived from the Latin word 'varix' which means twisted. The etiology and pathogenesis of primary varicose veins remain unclear. Valvular incompetence causing venous reflux is frequently observed and has long been postulated as the primary cause of vein wall weakness and dilatation ***(Lim and Davies, 2009).***

Although varicose veins have traditionally been regarded as simply a cosmetic problem more commonly they produce symptoms of heaviness fatigue, pain, swelling, restlessness, burning and pruritus which interfere with activities of daily living and result in lost time from work ***(Nael and Rothbun, 2009).***

About 10% of people with varicose veins go on to develop skin changes such as pigmentation or eczema, while about 3% may develop venous ulcers ***(Marsden et al., 2013).***

Duplex scanning is recommended as the first diagnostic test for all patients with varicose veins. It is safe, noninvasive, cost-effective and reliable ***(Gloviczki et al., 2011).***

Although varicose veins are common many remain asymptomatic and only a minority present for treatment ***(Beale and Gough, 2005).***

In addition to improving cosmetic appearance, current treatments for varicose veins are aimed at reducing venous hypertension and the resultant chronic inflammation that leads to ulceration ***(Rathbun and Kirkpatrick, 2007).***

Treatment options include conservative measures (lifestyle modification, medications and compression therapy), and if these are unsuccessful surgical and, more recently endovascular procedures, in which the vein is removed, ligated or sclerosed. These treatments may be used alone or in combination to improve the appearance and the lifestyle-limiting manifestations of varicose veins ***(Bartholomew et al., 2005).***