

بسم الله الرحمن الرحيم





شبكة المعلومات الجامعية التوثيق الالكتروني والميكرو فيلم



جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم

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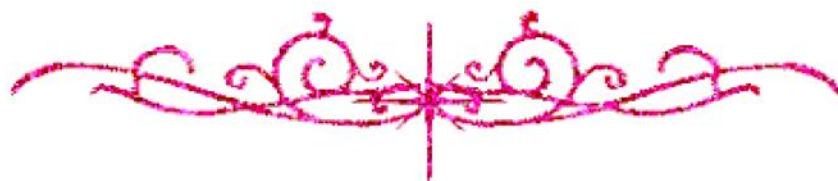


بعض الوثائق الأصلية تالفة





بالرسالة صفحات
لم ترد بالأصل





Endovascular Laser Therapy versus Open Surgery for the Treatment of Primary Varicose Veins of the Lower Limb

Thesis

*Submitted for Partial Fulfillment of
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✍ Beshoy Maher Yacoub Gebrael

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List of Abbreviations

Abb.	Full term
ABI.....	Ankle brachial index
AVP.....	Ambulatory venous pressure
CAT.....	Computed axial tomography
CEAP.....	Clinical, etiological, anatomical, pathophysiological
CM.....	Centimeter
CT.....	Computerized tomography
CVD.....	Chronic venous disease
CVI.....	Chronic venous insufficiency
DUS.....	Duplex ultrasound
DVT.....	Deep venous thrombosis
ECG.....	Electrocardiogram
EVHA.....	Endovenous heat ablation
EVHIT.....	Endovenous heat induced thrombosis
EVLA.....	Endovenous laser ablation
GSV.....	Great saphenous vein
HCG.....	Human Chorionic Gonadotropin
HL.....	High ligation
HS.....	Highly significant
HTN.....	Hypertension
IQL.....	Interquartile range
IVC.....	Inferior vena cava
KG.....	Kilogram
MG.....	Milligram
ML.....	Millileter
MM.....	Millimeter
MRI.....	Magnetic resonance imaging
NJP.....	Non junctional perforator

List of Abbreviations (cont...)

Abb.	Full term
NM.....	Nanometer
NS.....	Non significant
NSAIDS.....	Non steroidal anti inflammatory drugs
NV.....	Neovascularization
PE	Pulmonary embolism
PFO.....	Patent foramen ovale
POL.....	Polidocanol
PVI.....	Primary valvular incompetence
RFA.....	Radiofrequency ablation
S.....	Significant
SD.....	Standard Deviation
SEPS	Subfasial endoscopic perforator surgery
SFJ	Saphenofemoral junction
SPJ	Saphenopopliteal junction
SSV.....	Short saphenous vein
STD.....	Sodium tetradecyle sulphate
TIPP	Trans illuminated powered phlebectomy
TLA	Tumescent local anathesia
TRLOP	Transluminial occlusion of perforator
US.....	ultrasonography
VAS.....	Visual analogue score
VS	Versus

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INTRODUCTION

Venous drainage of the lower extremities is accomplished by a network of superficial veins connected to the deep veins by small perforator veins. Through a variety of pathophysiological mechanisms, weakness develops in the vein wall that results in varicosity over time. Varicosities typically form in the greater and lesser saphenous veins but also develop in branch vessels. Obstruction of the iliac veins or inferior vena cava can result in extensive varicose veins ⁽¹⁾.

Symptoms of varicose veins vary according to their size and extent. Initial symptoms and signs are localized to the areas of varicose veins include aching or throbbing discomfort, burning, pruritus, and dry irritated skin. More advanced chronic venous disease with venous valvular incompetence manifests with symptoms and signs such as leg heaviness and fatigue, edema, venous ulceration, may develop and cause further decrement in quality of life and functional status. Varicose veins may thrombose or rupture and bleed, especially when large, traumatized, or located over bony prominences. Varicose veins were associated with a 7- fold increased risk of DVT⁽²⁾.

Duplex ultrasound (DU) has changed vascular surgery practice over the last two decades as the preferred imaging modality for diagnosis and veins treatment. The advent of DU made it possible to evaluate the venous anatomy and its function at the same time. DU is a non-invasive method that

has other advantages such as lower cost, portability, reproducibility and it is safe to use. It can be repeated and utilized for prolonged periods with no risks to the patient. ⁽³⁾.

Open surgical treatment of venous abnormalities remains the standard of care and involves ligation, division, and stripping of the affected superficial vein. Surgical treatment of varicose veins can be performed under tumescent local anesthesia and aims to interrupt the reflux at the proximal and distal points of insufficiency and to remove any abnormal venous segments affected by incompetent valves. ⁽⁴⁾

Less invasive endovenous therapies have emerged more recently. Endothermal ablation techniques deploy an endoluminal catheter to deliver thermal energy and effect truncal vein occlusion. Laser and radiofrequency (RF) energy are the two methods commonly used to generate thermal energy. Heat destroys the endothelium and mural collagens, inducing coagulation and thrombus formation. Subsequent fibrosis and formation of a new collagen matrix further constricts the lumen to occlude the vein. Radiofrequency ablation (RFA) devices produce truncal ablation, with minimal discomfort and early return of patients to normal activity. ⁽⁵⁾.

Recent Evidence has suggested favourable results regarding the new modalities of management in terms of reduced postoperative hospital stay, early return to work and low complication rates ⁽⁶⁾.