A THESIS FOR PARTIAL FULFILMENT OF MASTER DEGREE IN

Comparative Study between Conventional Surgery and Radiofrequency Ablation in Treatment of Varicose Vein

Presented by

Mostafa Zaher Eisa Aborahma
M.B.B.Ch, 2013 - Mansoura University
Resident of Vascular Surgery - Nasser Institute.

Under Supervision of

Prof. Dr. Walid Atef Elian
Professor of General Surgery
Faculty of Medicine
Ain Shams University

Dr. Mohamed Ismail Mohamed
Lecturer of Vascular Surgery
Faculty of Medicine
Ain Shams University

Faculty of Medicine
Ain Shams University
2018

CONTENTS

LIST OF FIGURES

List of tables

LIST OF ABBREVIATIONS

AASV	**The anterior accessory saphenous vein**
ABI	Ankle brachial index
CEAP	Clinical, Etiological, Anatomical, pathological
CLF	closure fast catheter
CT	Computed Tomography
CVD	Chronic Venous Disease
CVI	Chronic Venous Insufficiency
DVT	Deep venous Thrombosis
DCFS	Direct Catheter Foam Sclerotherapy
EVLA	Endo Venous laser Ablation
GSV	Great Saphenous Vein
L&S	Ligation & Stripping
MDCT	Multi-detector CT
PASV	The posterior accessory saphenous vein
PPG	Photo Plethysmography
PVs	Perforating Veins
RFA	Radio Frequency Ablation
RCT	Randomized Controlled Trial
SSV	Short Saphenous Vein
STS	Sodium Tetradecyl Sulfate
SV	Saphenous Vein
VCSS	Venous Clinical Severity Score

ACKNOWLEDGMENT

First and for most, thanks to Allah, most merciful and greatest Benefice.

I would like to express my deepest gratitude and admiration to Prof. Dr. Walid Atef Elian; Professor of General Surgery, Faculty of Medicine Ain Shams University, for his valuable suggestions, guidance and continuous encouragement along the entire course of this work.

I have the greatest pleasure in acknowledging Dr. Mohamed Ismail Mohamed; Lecturer of Vascular Surgery, Faculty of Medicine Ain Shams University, for his supervision, and encouragements throughout this work.

.

I would like to thank all my professors, colleagues, staff of vascular surgery, Nasser Institute, Ain Shams University and all my family members for their assistance and kind care.

Mostafa Zaher Eisa Aborahma

Aim of the Work

The aim of this work is to analyze the benefit and complication of radiofrequency ablation versus surgical stripping of great saphenous vein.

This randomized clinical trial will clarify the advantages and disadvantages of both therapies in an attempt to choose the best method for treatment of primary varicose veins with least complication and highest success rate.

Introduction

Varicose veins, a common problem with effects on quality of life, account for a significant cost burden on the health care system ***(Jacobs et al, 2017).*** They are enlarged, tortuous, subcutaneous veins that commonly occur in the legs ***(El-Sheikha et al., 2015).***

Varicose veins are caused by faulty valves and decreased elasticity in the vein walls, which allow blood to backflow and pool. This is known as venous reflux. The affected veins enlarge and appear as green, dark blue or purple protrusions just below the skin's surface ***(Tisi, 2011)***.

The severity of symptoms associated with varicose veins varies and may include pain, heaviness ,pruritis ,ulceration, skin discoloration and edema. Severe symptoms include thrombophlebitis, bleeding and venous dermatitis, which often require intervention ***(Beale and Gough, 2005)***.

A variety of therapies are available for treating varicose veins, including conservative therapies, surgical interventions and nonsurgical intervention. Conservative therapies are commonly recommended in asymptomatic patients or those with mild to moderate symptoms. Surgical interventions generally become necessary when symptoms of varicose veins significantly impinge on the patient's quality of life ***(Willenberg et al., 2013).***

Junction ligation with or without vein stripping is generally appropriate when the GSV and SSV have reflux or incompetence is demonstrated on duplex scanning. This intervention is generally performed as an inpatient procedure under general anesthetic. Junction ligation involves tying off the vessel at the SFJ or SPJ. Ligation alone usually leads to high rates of varicose vein recurrence; therefore, patients often require after-care treatment, such as sclerotherapy. In most cases, ligation is accompanied by GSV stripping and is