LONG TERM FOLLOW UP OF PERIPHERAL ARTERIAL INTERVENTION

Thesis

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LIST OF ABBREVIATIONS

ABI = Ankle-brachial index.
ACC = American College of Cardiology
ACE = Angiotensin-converting enzyme.
ACS= Acute coronary syndromes.
AHA = American Heart Association.
Apo C-III= Apolipoprotein C-III.
CAPRIE =Clopidogrel versus Aspirin in Patients at Risk of Ischemic Events.
CFA=Common femoral artery.
CLEVER= Claudication: Exercise Versus Endoluminal Revascularization.
CLI = Critical limb ischemia
COPD = Chronic obstructive pulmonary disease
CTA = Computed tomographic angiography
DNA = Deoxyribonucleic acid.
DIC=Disseminated intra vascular coagulopathy.
DP =Dorsalis pedis.
FDA = Food and Drug Administration
HDL = High-density lipoprotein
HMG = Hydroxymethyl glutaryl.
IC= Intermittent claudication.
ICAM-1= Intercellular adhesion molecule-1
INR = International normalized ratio
LDL = Low-density lipoprotein
Lipoprotein (a)= Lp [a]
MI = Myocardial infarction
MRA = Magnetic resonance angiography.
NF-α=Tumor necrosis factor-α .
NF-κB=Nuclear factor-κB .
NO=Nitric oxide.
OR = odds ratio.

LIST OF ABBREVIATIONS (CONT.)

Ox-LDL= Oxidized LDL.
P = statistical significance
PAD = peripheral arterial disease.
PAI-1=plasminogen activator inhibitor-1.
PDGF =platelet-derived growth factor.
PPAR-α =Peroxisome proliferator-activated receptor-α.
PT= posterior tibial
PTA = percutaneous trans-luminal angioplasty.
PVD=Peripheral vascular disease.
SFA= Superficial femoral artery.
SMC=Smooth muscle cells.
Std. Deviation: Standard deviation.
TASC = Trans Atlantic Inter-Society Consensus Working Group.
TGF-β= Transforming growth factor-β
TIA = Transient ischemic attack.
TRLPs = Triglyceride-rich lipoproteins.
VCAM-1=Vascular cell adhesion molecule-1.
VLDL=Very low density lipoprotein.

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Introduction and Aim of the Work

INTRODUCTION

Peripheral arterial disease (PAD) is one manifestation of systemic atherosclerosis. The prevalence of PAD increases with the age of the population. [1,2]. It is important to remember the significant association of coincident coronary artery disease and cerebro-vascular disease in these patients, because it represents the major cause of major morbidity and mortality in the PAD population.[3].Remarkable technological advances in the past decade, along with patient preference, have shifted revascularization strategies from traditional open surgical approaches toward lower-morbidity percutaneous endovascular treatments. Catheter-based revascularization of the lower extremities was first performed by Charles Dotter[4] and advanced by Andreas Gruentzig, who employed then newly developed inflatable balloon catheters that could dilate vascular stenosis.[5]. The availability of stents, more than any other advance, has fueled the growth of catheter-based procedures by improving the safety, durability, and predictability of percutaneous revascularization.

Endovascular therapy offers several distinct advantages over open surgical revascularization for selected lesions.[6,7].It is performed with local

anesthesia, which enables the treatment of patients who are at high risk for general anesthesia. The morbidity and mortality from catheter-based therapy is extremely low, especially compared with open surgical revascularization. After successful percutaneous revascularization, patients are ambulatory on the day of treatment, and unlike after vascular surgery, they can often return to normal activity within 24 to 48 hours of an uncomplicated procedure. Endovascular therapies generally do not preclude or alter subsequent surgery and may be repeated if necessary.

Multiple specialties, including interventional cardiology, have contributed to the advancement of the field of peripheral vascular intervention over the past several decades.[8]. The recognition of an unmet need for a trained cadre of clinicians to care for patients with PAD prompted the development of a core curriculum document (COCATS-11) [9] and a multispecialty societal competency statement. [10]. The American Heart Association and American College of Cardiology have published guidelines and recommendations for the diagnosis and treatment of PAD.[2] Improved patient and physician awareness of PAD and the availability of high-quality noninvasive diagnostic imaging have increased the number of patients seeking treatment for PAD.