بسم الله الرحمن الرحيم

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تم رفع هذه الرسالة بواسطة / سلوي محمود عقل

بقسم التوثيق الإلكتروني بمركز الشبكات وتكنولوجيا المعلومات دون أدنى مسئولية عن محتوى هذه الرسالة.

ملاحظات:
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Evaluation of the Relationship between Carotid Intima Media Thickness and Coronary Artery Disease in Patients Evaluated by CT Coronary Angiography

Thesis

Submitted for Partial Fulfillment of Master Degree in Radiodiagnosis

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Samar Essam Abdul Azziz Mohamed

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List of Abbreviations

Abb.	Full term
ACAS	*Asymptomatic Carotid Artery Study*
ACS	*Acute coronary syndrome*
CAD	*Coronary artery disease*
CAD-RADS	*Coronary Artery Disease Reporting and Data System*
CC	*Common carotid*
CCA	*Common carotid artery*
CIMT	*Carotid intima media thickness*
CPR	*Curved planar reformation*
CX	*Circumflex artery*
DSCT	*Dual-source computed tomography*
ECA	*External carotid artery*
ECST	*European Carotid Surgery Trial*
ICA	*Internal carotid artery*
IHD	*Ischemic heart disease*
IMA	*Internal maxillary artery*
IMT	*Intima media thickness*
IQR	*Interquartile range*
LA	*Left atrium*
LAD	*Left anterior descending*
LCA	*Left coronary artery*
LCx	*Left circumflex artery*
LDL	*Low-density lipoproteins*
LIMA	*Left internal mammary artery*
LM	*Left main*
LV	*Left ventricle*
MDCT	*Multi-detector row computed tomography*
MIP	*Maximum intensity projection*
MPR	*Multiplanar reformation*
NASCET	*North American Symptomatic Carotid Endarterectomy Trial*
NS	*Non significant*
OM	*Obtuse marginal*
PDA	*Posterior descending artery*

List of Abbreviations **cont...**

Abb.	Full term
PL	*Posterolateral*
RA	*Right atrium*
RCA	*Right coronary artery*
RI	*Ramus intermedius*
RI	*Resistive index*
RIMA	*Right internal mammary artery*
S	*Significant*
SD	*Standard deviation*
SPSS	*Statistical package for Social Science*
STA	*Superficial temporal artery*
SVC	*Cavae both superior*
UHR-CT	*Ultra high resolution CT scan*
VR	*Volume rendering*
VRTs	*Volume-rendering techniques*

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INTRODUCTION

Coronary artery disease (CAD) is associated with high mortality around the world, hypertention, diabetes and smoking are common risk factors for CAD ***(Gheisari et al., 2020).***

Coronary and carotid arteries are the two most common to be affected by atherosclerosis ***(Saxena et al., 2019).***

The relationship of the coronary and carotid atherosclerosis has been confirmed ***(Hulthe et al., 1997).***

Many changes occur in the wall of the artery including endothelial dysfunction and increase in the intima media thickness (IMT) before appearance of the clinical symptoms so these changes are useful in early detection of atherosclerosis ***(Halcox et al., 2009).***

It has been hypothesized that IMT would increase with hypertention, diabetes mellitus, hyperlipidemia, age and other factors that are related to CAD ***(Collins et al., 2012).***

Interventional and non-interventional methods to detect atherosclerosis are widely used in clinical practice, carotid intima media thickness (CIMT) has been recommended by the American Heart Association as the most useful method to detect atherosclerosis ***(Papageorgiou et al., 2016).***