



**THE ROLE OF MULTI DETECTOR CT
CORONARY ANGIOGRAPHY IN
EVALUATION OF PATIENTS
WITH UNSTABLE ANGINA**

Thesis

*Submitted for partial fulfillment of Master Degree
in Radiodiagnosis*

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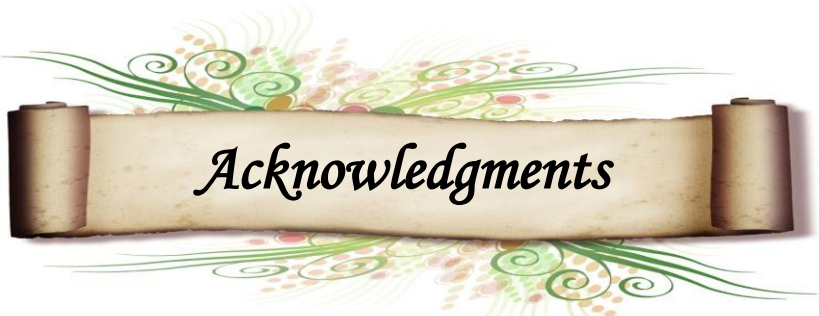
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2014



Acknowledgments

*I Praise **Allah** Thank Him, Seek His Help,
Guidance and Forgiveness ... then:*

*My deepest thanks and appreciation to **Dr. Maha A. El-Shinnawy**, Assistant Professor of Radiodiagnosis, Faculty of Medicine, Ain Shams University, for her invaluable guidance and help in supervising this work. No words can express my feelings, respect and gratitude to her.*

*I am grateful to **Dr. Remon Zaher Elia**, Lecturer of Radiodiagnosis, Faculty of Medicine, Ain Shams University, for his effort.*

*Special thanks for **Dr. Ahmed Saied Tawfeeq**, Assistant Professor of Radiodiagnosis, Faculty of Medicine, Tikrit University, for his guidance, encouragement, and unlimited support.*

*I would like to thank **Dr. Sherif Maher**, Lecturer of Radiodiagnosis, Faculty of Medicine, Cairo University for his support and training in the field of work*

*At last, but definitely not the least, I deeply thank **My Father, Mother, Brothers, Sisters, wife & Sons** for their endless support and encouragement to complete this work.*

Table of Contents

Contents	Page
List of Tables	ii
List of Figures	iii
List of Abbreviation	V
Introduction & Aim of the Work	1
Review of literature:	
<i>Chapter I - Anatomy of the coronary arteries</i>	5
<i>Chapter II - Physical Principles</i>	31
<i>Chapter III - Unstable Angina</i>	67
<i>Chapter IV - Performance of CTCA</i>	85
Patients & Methods	101
Results	115
Master Table	127
Illustrative Cases	129
Discussion	149
Summary & Conclusion	157
Recommendations	161
References	163
Arabic Summary	-

List of Tables

Table No.	Title	Page
Table 1	Relation of calcium score and risk of cardiac events	20
Table 2	Developments in multislice CT scanners	42
Table 3	Categories of coronary calcium scoring	79
Table 4	The findings of CTCA	116
Table 5	Ca Scoring in relation to sex	119
Table 6	CACS Scoring in relation to Age	119
Table 7	Ca Scoring in relation to sex below 60 years old	119
Table 8	Ca Scoring in relation to male and female $\geq$ 60 years old	120
Table 9	CACS in relation to risk factors	120
Table 10	Distribution of the lesions through coronaries and their degree of stenosis, SD: Standard Deviation.	124
Table 11	The relation between number of vessel affection and the degree of stenosis	124
Table 12	The relation between number of vessel affection and the degree of stenosis	125
Table 13	The Number of vessels affection in diabetic / non diabetic and hypertensive / normotensive patients	125
-	Master Table	127

List of Figures

Fig. No.	Title	Page
Fig 1	Origin of the Coronary Arteries	5
Fig 2	Right coronary artery (RCA) anatomy	6
Fig 3	Multiple coronary ostia	7
Fig 4	Course of RCA	8
Fig 5	Distal dominant right coronary artery	8
Fig 6	Left coronary system	10
Fig 7	Trifurcation of LM system	11
Fig 8	CT images of normal heart	12
Fig 9	Coronary Dominance	14
Fig 10	Major cardiac veins	16
Fig 11	Coronary artery segments	18
Fig 12	Single coronary artery	22
Fig 13	LCA arising from the right coronary sinus	24
Fig 14	LCA anomaly	25
Fig 15	LAD Bridging	26
Fig 16	Duplication of the LAD	27
Fig 17	Coronary artery fistula	28
Fig 18	3D VR with 64-slice CT	39
Fig 19	Three-dimensional volume rendering	40
Fig 20	3D VR with 320-slice CT	41
Fig 21	Retrospective ECG without tube current modulation	44
Fig 22	Retrospective ECG with tube current modulation	45
Fig 23	Prospective electrocardiogram-triggering	50
Fig 24	Importance of the ECG gating	52
Fig 25	Systolic vs. Diastolic reconstruction	53

List of Figures

Fig. No.	Title	Page
Fig 26	Multiplanar reconstructions	57
Fig 27	MIP projection	59
Fig 28	Pulsation (step ladder) artifact	61
Fig 29	Stepladder artifact due to respiratory motion	63
Fig 30	Streak artifacts	65
Fig 31	Pitfalls of interpretation	66
Fig 32	Pathogenesis of acute coronary syndromes	74
Fig 33	Coronary artery calcification with threshold	75
Fig 34	Coronary artery calcification with threshold	76
Fig 35	Bolus tracking technique	91
Fig 36	Effect of saline chaser	92
Fig 37	Pie chart representing patient's gender	115
Fig 38	Cylinder chart represents the risk factors of the patients	115
Fig 39	Pie chart represents the frequency of CAD among patients with recent onset chest pain	116
Fig 40	Bar chart represents CAD in correlation to Risk factors	117
Fig 41	Bar chart represents the frequency and significance of CAD regarding CACS	118
Fig 42	Represents the percentage of patient according to pretest probability based on age, gender, and character of pain	121
Fig 43	Represents the percentage of CTCA finding in respect to pretest probability based on age, gender, and character of pain	122
Fig 44	Pie chart represents the types of plaque	126

List of Figures

Fig. No.	Title	Page
Fig 45	Cylinder chart Represents the types of plaque that caused significant stenosis	126
Fig 46	Case 1	129
Fig 47	Case 2	131
Fig 48	Case 3	133
Fig 49	Case 4	135
Fig 50	Case 5	137
Fig 51	Case 6	139
Fig 52	Case 7	141
Fig 53	Case 8	143
Fig 54	Case 9	145
Fig 55	Case 10	147

List of Abbreviation

3D	Three Dimension
ACD	Acute Coronary Disease
ACE	Automatic Exposure Control
ACS	Acute Coronary Syndromes
AHA	American Heart Association
Ao	Aorta
AP	Antero-Posterior
AVN	Atrioventricular Node
BMI	Body Mass Index
bpm	Beat per Minute
CABG	Coronary Artery Bypass Grafting
CAC	Coronary Artery Calcium
CACS	Coronary Artery Calcium Score
CAD	Coronary Artery Disease
CHD	Coronary Heart Disease
CT	Computed Tomography
CTCA	CT Coronary Angiography
D	Diagonal Branch
DM	Diabetes Mellitus
EBCT	Electron Beam Computed Tomography
ECG	Electrocardiography
HU	Hounsfield Unit
IHD	Ischemic Heart Disease
IMB	Inferior Marginal Branch

List of Figures

KV	Kilo Volt
kVp	Kilo Voltage Peak
LAD	Left Anterior Descending
LAO	Left Anterior Oblique
LCX	Left Circumflex
LM	Left Main Coronary
LV	Left Ventricle
mA	milli-Ampere
mAS	milli-Ampere Second
MDCT	Multidetector Computed Tomography
MI	Myocardial Infarction
MIP	Maximum Intensity Projection
MPR	Multiplanar Reformation
MSCT	Multislice Computed Tomography
NPV	Negative Predictive Value
PDA	Posterior Descending Artery
PLB	Posterior Lateral Branch
RAO	Right Anterior Oblique
RCA	Right Coronary Artery
RI	Ramus Intermedius Artery
ROI	Region Of Interest
S	Septal branch
SD	Standard Deviation
UA	Unstable Angina
VR	Volume Rendering

Introduction

&

Aim of the Work

Introduction

Unstable angina is defined as new onset chest pain or abrupt deterioration in previously stable angina. It is caused by temporarily inadequate oxygen delivery to a portion of the heart muscle (myocardial ischemia) due to either increased oxygen demand (as in exercise) or decreased oxygen supply (as during coronary artery spasm) (***Koulaouzidis et al., 2012***).

It is a clinical syndrome between stable angina and acute myocardial infarction in which the thoracic pain may mark the onset of acute myocardial infarction. It typically occurs at rest and has a sudden onset, sudden worsening, and recurrence over days and weeks. It carries a more severe short-term prognosis than stable chronic angina (***Russo et al., 2010***).

It is also defined as chest pain with altered frequency or character that is suspicious for acute coronary artery disease (CAD). (***Dedic et al., 2011***).

Coronary artery disease (CAD) remains the commonest cause of morbidity and mortality in the developed countries, and a leading cause of death in Western countries (***Koulaouzidis et al., 2012***).