The Impact of Multislice Computed Tomographic Angiography on the Diagnosis and Management of Congenital Heart Disease

Thesis for partial fulfillment of M.D degree in Cardiology

Submitted by
MOHAMED ABD EL-RAZIK GHAZY
M.B.B.Ch, M.Sc

Under supervision of

Prof.Dr. Maiy Hamdy El-Sayed
Professor of Cardiology - Ain Shams University

Prof.Dr. Ghada Samir El-Shahed
Professor of Cardiology - Ain Shams University

Dr. Hebatalla Mohamed Atia
Lecturer of Cardiology - Ain Shams University

Dr. Alaa Mahmoud Roushdy
Lecturer of Cardiology – Ain Shams University

Dr. Hasan El-Sayed Abd El-Monem
Radiodiagnosis department El-Galaa Military Family Hospital

Ain Shams University
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List of Abbreviations

ADC Analogue digital converter

ALARA As low as reasonably achievable

ALCAPA Anomalous Left Coronary Artery from Pulmonary Artery

AS Aortic Stenosis

ASD Atrial septal defect

BEIR Biological effect of ionized radiation

CAT Computed axial tomography

CCA Common Carotid Artery

CHD Congenital heart disease

CMR Cardiac magnetic resonance

cMPR Curved multiplanar reformatting

CoA Coarctation of Aorta

CS Coronary sinus

CT Computed tomography

DLP Dose length product

DORV Double Outlet Right Ventricle

ECG Electrocardiogram

EMI Electrical and Musical Industries

EP Electrophysiology

FDA Food and Drug Administration

FOV Field of view

FSV Functioning single ventricle

Gy Gray; radiation dose measurement unit

HU Housfield unit

HLHS Hypoplastic Left heart syndrome

IAA Interrupted aortic arch

IEC International electronical commission

IVC Inferior Vena Cava

Kg Kilogram

kVp Kilovolt potential

LA Left Atrium

LPA Left pulmonary artery

LV Left ventricle

mA Milliampere

MAPCA Major Aorto Pulmonary Collateral Artery

mAs Milliampere second

MBT Modified Blalok-Taussig

MDCT Multi detector row computed tomography

MIP Maximum intensity projection

MPR Multiplanar reformatting

MR Magnetic resonance

MRI Magnetic resonance imaging

MSCT Multi slice computed tomography

mSv MilliSievert; radiation dose measurement unit

NSF Nephrogenic systemic fibrosis

PA Pulmonary Artery

PAPVD Partial anomalous pulmonary venous drainage

PAVM Pulmonary Arterio-Venous malformation

PDA Patent Ductus Arteriosus

PPG Peak Pressure Gradient

PS Pulmonary stenosis

RA Right atrium

RAA Right aortic arch

RPA Right pulmonary artery

RV Right Ventricle

SSFP Steady state free precession

SVC Superior Vena Cava

TAPVD Total anomalous pulmonary venous drainage

ToF Tetralogy of Fallot

UK United Kingdom

ULPV Upper Left Pulmonary Vein

US United States

VR Volume rendering

VSD Ventricular septal defect

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