

A-Z Notes in Radiological Practice and Reporting

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MDCT and MRI of the Heart

 Springer

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Foreword to this Series

A-Z Notes in Radiological Practice and Reporting is a new series of practical guides dedicated to residents and general radiologists. The series was born thanks to the original idea to bring to the public attention a series of notes, collected by doctors and fellows during their clinical activity and attendance at international academic Institutions. Those brief notes were critically reviewed, sometimes integrated, cleaned up and organized in the form of an A-Z glossary, to be usable by a third reader.

The ease and speed of consultation and the agility in reading were behind the construction of this series and were the reasons why the booklets are organized alphabetically, primarily according to disease or condition. The number of illustrations has been deliberately reduced and focused only on those ones relevant to the specific entry.

Residents and general radiologists will find in these booklets numerous quick answers to frequent questions occurring during radiological practice, which will be useful in daily activity for planning exams and radiologic reporting.

Each single entry typically includes a short description of pathological and clinical characteristics, guidance on selection of the most appropriate imaging technique, a schematic review of potential diagnostic clues, and useful tips and tricks.

The series will include the most relevant topics in radiology, starting with cardiac imaging and continuing with the gastrointestinal tract, liver, pancreas and bile ducts and genitourinary apparatus during the first two years. More arguments will be covered in the next issues.

The Editors put a lot of their efforts in selecting the most appropriate colleagues willing to exchange with readers their own experiences in their respective fields. The result is a combination of experienced professors, enthusiastic researchers and young talented radiologists working together within a single framework project, with the primary aim of making their knowledge available for residents and general practitioners.

We really do hope that this series can meet the satisfaction of the readers and can help them in their daily radiological practice.

Latina, Italy

Andrea Laghi
Carlo Nicola De Cecco

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Abbreviations

4CH	Four-chamber view
ALCAPA	Anomalous LCA from pulmonary artery
ARCAPA	Anomalous RCA from pulmonary artery
ARVC	Arrhythmogenic right ventricular cardiomyopathy
ASD	Atrial septal defect
AV	Atrioventricular
AVM	Arteriovenous malformation
AVSD	Atrioventricular septal defect
BB	Black blood
BMI	Body mass index
BSA	Body surface area
CAD	Coronary artery disease
CCTA	Coronary CT angiography
CEMRA	Contrast-enhanced magnetic resonance angiography
CRT	Cardiac resynchronization therapy
CT	Computed tomography
CTA	CT angiography
CTDI	CT dose index
DLP	Dose length product
DVT	Deep vein thrombosis
ECG	Electrocardiography

EDV	End-diastolic volume
EG	Early gadolinium
FA	Flip angle
FDR	First-degree relatives
FFR	Fraction flow reserve
FLASH	Fast low angle shot
GCA	Giant cell arteritis
GFR	Glomerular filtration rate
HR	Heart rate
ICD	Implantable cardioverter defibrillator
IHD	Ischemic heart disease
IMH	Intramural hematoma
IP-PC	In-plane phase contrast
iRVEDV	Indexed right ventricle end-diastolic volume
IVC	Inferior vena cava
LA	Left atrium
LAS	Low amplitude signal
LBBB	Left bundle branch block
LBI	Left bundle inferior
LCA	Left coronary artery
LCX	Left circumflex artery
LE	Late enhancement
LIMA	Left internal mammary artery
LM	Left main
LP	Late potential
LV	Left ventricle
LVA	Left ventricular assist device
LVIT	Left ventricle inflow tract
LVOT	Left ventricle outflow tract
LVSV	Left ventricle stroke volume
MAPCAs	Major aortopulmonary collateral arteries
MI	Myocardial infarction
MIP	Maximum intensity projection
MPA	Main pulmonary artery

MR	Magnetic resonance
NSF	Nephrogenic systemic fibrosis
NSVT	Nonsustained ventricular tachycardia
NYHA	New York Heart Association
PAH	Pulmonary arterial hypertension
PC	Phase contrast
PCI	Percutaneous coronary intervention
PE	Pulmonary embolism
PET	Positron emission tomography
PFO	Patent foramen ovale
PMK	Pacemaker
PV	Pulmonary vein
RA	Right atrium
RBBB	Right bundle branch block
RCA	Right coronary artery
RIMA	Right internal mammary artery
RMS	Root mean square
ROI	Region of interest
RPA	Right pulmonary artery
RV	Right ventricle
RVOT	Right ventricle outflow tract
RVSV	Right ventricle stroke volume
SAECG	Signal-averaged electrocardiography
SAM	Systolic anterior movement
SAR	Specific absorption rate
SD	Sudden death
SI	Signal intensity
SLE	Systemic lupus erythematosus
SPECT	Single-photon emission computed tomography
SSFP	Steady-state free precession
STIR	Short TI inversion recovery
SVC	Superior vena cava
SVG	Single vessel graft
TAD	Terminal activation duration

TAPVR	Total anomalous pulmonary venous return
TAS	Transaxial cine stack
TCPC	Total cavopulmonary connection
TDI	Tissue doppler imaging
TE	Echo time
TFC	Task force criteria
TGA	Transposition of great arteries
TI	Inversion time
TOE	Transesophageal echocardiography
ToF	Tetralogy of fallot
TP-PC	Through-plane phase contrast
TR	Repetition time
TTE	Transthoracic echocardiography
VENC	Velocity encoded
VLA	Vertical long axis
VPS	View per segment
VSD	Ventricular septal defect
VT	Ventricular tachycardia
W/L	Weight/length
WHO	World Health Organization