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Strain analysis using feature tracking cardiac magnetic resonance (FT-CMR) in assessment of myocardial viability in chronic ischemic patients

Thesis
Submitted for Partial Fulfillment of MD Degree in Radiodiagnosis

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Candidate

Sara W. Tantawy

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List of Abbreviations

AHA	American Heart Association
CABG	Coronary artery bypass grafting
CAD	Coronary artery disease
CCS	Chronic coronary syndrome
CMR	Cardiac magnetic resonance
DENSE	Displacement Encoding with Stimulated Echoes
EF	Ejection fraction
ECG	Electrocardiogram
ESC	European Society of Cardiology
FT-CMR	Feature tracking – cardiac magnetic resonance
FT	Feature tracking
GLS	Global longitudinal strain
GCS	Global circumferential strain
GRS	Global radial strain
IHD	Ischemic heart disease
MI	Myocardial infarction
LAD	Left anterior descending artery
LCx	Left circumflex artery
LGE	Late gadolinium enhancement
LV	Left ventricle
LM	Left main artery
LVEF	Left ventricular ejection fraction
LVOT	Left ventricular outflow tract
PCI	Percutaneous coronary intervention

RCA	Right coronary artery
RWMA	Regional wall motion abnormality
SCS	Segmental circumferential strain
SENC	strain-encoded
SPECT	single-photon emission computerized tomography
SRS	Segmental radial strain
SSFP	Steady-state in free-precession
STE	Speckle tracking echocardiography
STEMI	ST-segment elevation myocardial infarction