

ERASMUS COURSE

Cardiovascular MRI with CT correlation Porto (PT), 2-4th September 2021

General Information

This course is dedicated to teaching the clinical applications of CT and MRI of the heart and vessels. Different pathologies and important issues for daily clinical practice will be discussed in plenary sessions, as well as the technological advances that contribute to a faster and more reliable diagnosis including future perspectives. Workshops will be given to practice image processing tools for MRI.

The course is aimed at Radiologists, Cardiologists, MRI and CT Technicians, Residents in radiology and cardiology, Physicians and Physicists who currently work or will work in the future with MRI and/or CT regarding cardiovascular diagnosis. Participants will have the opportunity to familiarize themselves with the basic knowledge as well as the advanced applications of cardiovascular normal or pathologic conditions.

Those who pass an examination at the end of the course will receive a certificate.

CME-accreditation will be requested.

COURSE ORGANIZATION:

Local: J. Alves Costa (Porto, PT)

Co-organizer and course coordinator: H. Lamb (Leiden, NL)

VENUE: Porto, Hotel HF Ipanema Park

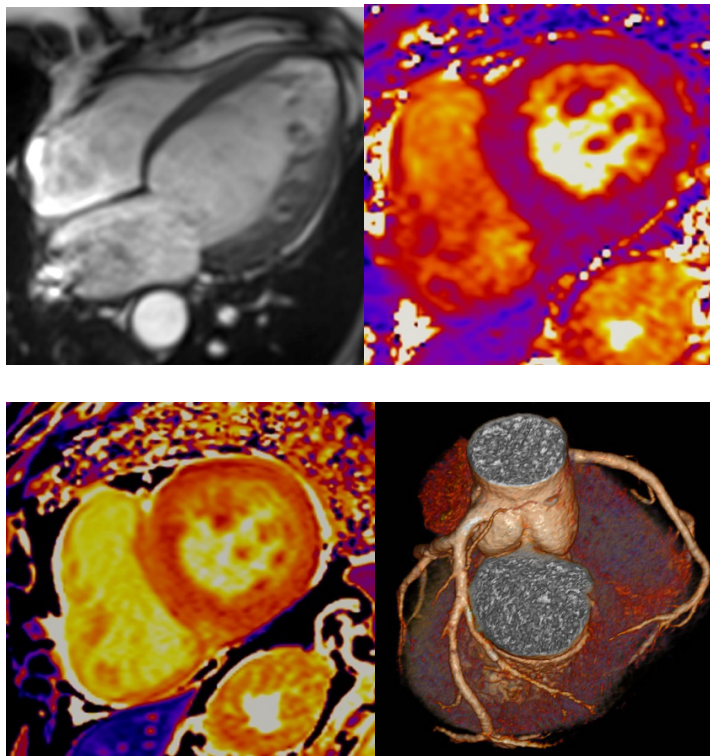
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Programme

Thursday 2nd September

8.00-8.15: Registration

8.15-8.30: Introduction: (J. Alves Costa, Porto, PT)

Basics, Technical Issues and New Technologies

8.30-9.00: CMR: the future is 3D and EZ: H. Lamb (Leiden, NL)

9.00-9.30: CCT acquisition: a refresh of basic technical aspects: N. Bettencourt (Porto, PT)

9.30-10.00: CMR and CCT: challenges in acquisition: how do I managed difficult cases? L.Natale (Rome, IT)

10.00- 10.20: Coronary arteries CT anatomy and variants J. Alves Costa (Porto, PT)

10.20-10.40: Cardiac CT anatomy besides coronary arteries: M. Vieira (Porto, PT)

10.45-11.05: Coffee break

CCT and CMR: Ischemic Heart Disease

11.10-11.30: Coronary CTA indications and how I report it: M. Vieira (Porto, PT)

11.30-12.00: What to report in CTA for evaluation of stents and CABGs: R. Salgado (Antwerp, BE)

12.00-12.30: New techniques: CT- FFR vs CMR stress perfusion: Nuno Bettencourt (Porto, PT)

12.30-12.50: CMR in Ischemic Heart Disease: from perfusion to infarction: J. Alves Costa (Porto, PT)

12.50-13.00: Questions & Answers

13.00-14.30: Lunch

14.30-17.45: Workshops

Workshop I (60'): CMR perfusion and viability: how I do it (L. Natale)

Workshop II (60'): Coronary CTA: stenosis quantification (N. Bettencourt)

Workshop III (60'): CT: anatomy of the heart and coronary arteries anomalies (M. Vieira)

Friday 3rd September

CMR: Non Ischemic Myocardial Diseases

8.30-9.00: The role of LGE differentiating non ischemic myocardial diseases: L. Natale (Rome, IT)
9.00-9.30: Parametric imaging (T1, T2, T2* mapping) and recent developments in Iron Quantification: H. Lamb (Leiden, NL)
9.30-10.00: Does T1 mapping and ECV minimize the need of biopsies in cardiac amyloidosis? H. Lamb (Leiden, NL)
10.05-10.25: Coffee break
10.30-11.00: Hypertrophic Cardiomyopathy - tissue characterization: M. Francone (Milan, IT)
11.00-11.30: Myocarditis – the role of parametric imaging: A. de Roos (Leiden, NL)
11.30-12.00: Diabesity Imaging: H. Lamb (Leiden, NL)
12.00-12.10: Questions & Answers
12.15-13.45: Lunch
14.00-17.15: Workshops
Workshop IV (60'): Hypertrophic heart and CMR: different diagnosis (M. Francone and J. Alves Costa)
Workshop V (60'): Myocarditis and special cases (A. de Roos)
Workshop VI (60'): CMR in non ischemic heart disease: differentials (M. Vieira)

Saturday 4th September

Congenital Heart Disease and Novel Tools for Image Analysis

8.15- 8.40: Pre-surgical evaluation of Congenital Heart Diseases: CMR or CCT? A. De Roos (Leiden, NL)
8.40-9.10: Post-surgical evaluation of Congenital Heart Disease patients: A. De Roos (Leiden, NL)
9.10-9.40: The cardiologic pediatric point of view: what is it important to know from CCT or CMR before surgical repair of different congenital heart diseases: M.J. Baptista (Porto, PT), João Sarmiento (Porto, PT)
9.40-10.10: Artificial Intelligence basics and cardiovascular applications: H. Lamb (Leiden, NL)
10.15-10.35: Coffee break

Valvular Heart Disease

10.40-11.10: Evaluation Pre – and Pos- TAVI: R. Salgado (Antwerp, BE)
11.10-11.40: Valvular Heart Disease: CMR evaluation with 2D and 4D Flow: H. Lamb (Leiden, NL)

Aortic Diseases

11.40-12.10: Acute and chronic aortic diseases: when to use CT or MR? R. Salgado (Antwerp, BE)

Cardiac Masses and Pericardium

12.10-12.40: Cardiac masses and pericardium: L. Natale (Rome, IT)
12.40-12.55: Questions & Answers
13.10-14.40: Lunch
14.45-18.00: Workshops
Workshop VII: Congenital Heart Diseases: CCT cases (H. Rodrigues)
Workshop VIII: Evaluation of Aortic Stenosis: how I do it (R. Salgado)
Workshop IX: Aortic evaluation: acute syndromes and chronic diseases (Paulo Donato)
18.10-18.40: Test
18.40: Adjourn