

ADVANCED COURSE ON CARDIAC INTENSIVE CARE

ACADEMIA CARDIOVASCULAR
Sociedade Portuguesa de CARDIOLOGIA

3rd Edition - 2022



Academia
Cardiovascular
Sociedade Portuguesa de CARDIOLOGIA



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Module 1 – Acute Coronary Syndromes 1 (3 hours)

- Pathophysiology of Acute Coronary Syndromes - *António Tralhão*
- Classical EKG patterns and difficult diagnostic patterns - *António Tralhão*
- Role of myocardial necrosis markers - *Ana Teresa Timóteo*
- ST elevation myocardial infarction – Pre-hospital and early hospital management
Silvia Monteiro
- ST elevation myocardial infarction – Hospital management - *Silvia Monteiro*
- Bleeding complications: how to prevent and treat - *Jorge Mimoso*

Module 2 – Acute Coronary Syndromes 2 (3 hours)

- Non-ST elevation Acute Coronary Syndromes – Risk stratification and invasive management - *António Gaspar*
- Non-ST elevation Acute Coronary Syndromes – Double antiplatelet treatment and anticoagulation - *António Gaspar*
- Co-morbidities – Elderly, Diabetes and Renal Insufficiency - *Jorge Mimoso*
- Initial management and treatment of mechanical and arrhythmic complications
Silvia Aguiar Rosa
- Takotsubo cardiomyopathy management and MINOCA - *Ana Teresa Timóteo*
- Secondary prevention and Cardiac Rehabilitation - *Ana Abreu*

Module 3 – Heart Failure (HF) 1 (3 hours)

- Epidemiology, mechanisms, and triggers for acute HF - *Catarina Gomes*
- Clinical and hemodynamic profiles: definition and management - *Pedro Morais Sarmento*
- Management of hospitalized patient – how to assess congestion I: clinical and biomarkers
Pedro Morais Sarmento
- Management of hospitalized patient – how to assess congestion II: imaging and functional tests - *Catarina Gomes*
- Pharmacological treatment: Trials in acute HF – a failure history - *Rui Baptista*

Module 4 – Heart Failure 2 (3 hours)

- Comorbidities in the management of HF patients: diuretics resistance and anemia
Ana Teresa Timóteo
- Comorbidities in the management of HF patients: diabetes and depression
Marta Nogueira
- Advanced HF: heart transplantation and long-term mechanical support
Tiago Pereira Silva
- Short-term mechanical support: intra-aortic balloon and percutaneous axial pumps
Rui Baptista

Module 5 – Heart Failure 3 (3 hours) - Roberto Roncon Jr e equipa

- ECMO-VA in the adult - indications and contraindications
- Physiology of the patient in ECMO
- ECMO circuit components. Cannulation and de-cannulation techniques
- Monitoring of the ECMO patient

Module 6 – Acute Aortic Syndrome (AAS) (3 hours)

- Presentation and initial management of the patient with suspicious AAS: anamnesis, physical examination, management algorithms, differential diagnosis, AAS classification

Ricardo Ladeiras Lopes

- Role of imaging in the evaluation of the aorta in AAS stratification:

Role of CT and echocardiography - *Ricardo Ladeiras Lopes*

- Aortic dissection type A treatment: initial management and indication for surgery

Rui Cerqueira

- Aortic dissection type B: pharmacological treatment and indications for intervention (TEVAR)

Daniel Brandão

- Treatment of other forms of AAS - *Rui Cerqueira*

Module 7 – Infective endocarditis (3 hours)

- Diagnosis of infective endocarditis: clinical, diagnostic criteria and blood culture interpretation

Roberto Pinto

- Role of imaging in endocarditis diagnosis: from echocardiography to Scintigraphy

Francisco Sampaio

- Endocarditis treatment: what is essential to know about antibiotic treatment - *Roberto Pinto*

- Endocarditis treatment: indications for surgical treatment - *Pedro Coelho*

Module 8 – Non-infectious acute valvular heart disease and acute Pulmonary Embolism (PE) (3 hours)

- Role of echocardiography in the evaluation of acute valvular heart disease: focus on aortic and mitral regurgitation - *Carla Sousa*

- Initial management and treatment of acute mitral and aortic regurgitation - *Marta Ponte*

- Diagnosis and risk stratification in acute PE: role of clinical, biomarkers and imaging

Maria Trêpa

- Treatment of acute PE: indication for thrombolysis and support care in the acute phase

Maria Trêpa

- Invasive treatment of PE: advantages, limitations, and indications for mechanical thrombolysis

José Alberto Rodrigues

Module 9 – Arrhythmias (3 hours)

- Tachydysrhythmias with normal QRS: diagnosis and treatment - *Bruno Piçarra*
- Tachydysrhythmias and wide RS: diagnosis and treatment - *Diogo Cavaco*
- Bradydysrhythmias: diagnosis and treatment - *João Filipe Carvalho*
- Troubleshootings in patients with devices (pacemakers, CDI and CRT) - *Bruno Valente*
- Care after ablation therapy in electrophysiology - *Diogo Cavaco*
- Lead extraction - *Bruno Valente*

Module 10 – Immediate care after coronary and structural cardiac intervention (3 hours)

- Coronary angioplasty - *Bruno Piçarra*
- TAVI - *Daniel Caeiro*
- Mitraclip - *Daniel Caeiro*
- Alcoholic septal ablation and Left atrial appendage closure - *Antonio Fiarresga*
- ASD / PFO closure and other interventional procedures in congenital heart disease
António Fiarresga
- Post-operative of cardiac surgery – main immediate challenges - *Luis Coutinho Miranda*

Module 11 – Support treatment in cardiac intensive care (3 hours)

- Ventilation: from theory to practice - *Doroteia Silva*
 - o Heart-lung interdependence in critical patient
 - o How and when to ventilate critical patient
 - o Prevention strategies of ventilator lung-related injury
- Sedation and analgesia: specificities in critical cardiac patient - *Catarina Barreiros*
- Kidney and cardiac intensive care - *Sérgio Gaião*
 - o Cardio-renal syndrome: understand and prevent
 - o Definition and diagnosis of acute kidney injury
 - o Renal support of the cardiac critical care patient
- Sepsis in the CCU: prevention strategies, early diagnosis, treatment, and complications management - *Rita Ferreira*
- Nutrition in critical care: poor sibling of determinant factor - *Paulo Martins*

Module 12 – Echocardiography in Cardiac Intensive Care (1 hour)

- Transthoracic Echocardiography in cardiac intensive care / emergency - *José Ribeiro*
- Transesophageal Echocardiography in cardiac intensive care / emergency - *Ana Galrinho*

Video conference Sessions:

Módulo 1 e 2 – 15 January

Módulo 3,4 e 5 – 26 February

Módulo 6, 7 e 8 – 26 March

Módulo 9 e 10 – 30 April

Módulo 11 e 12 – 28 May

Course Director:
Ana Teresa Timóteo

Course Co-Directors:
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Rui Baptista
Bruno Piçarra
Marisa Silva



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