

Discipline MCP5894
Interventional Cardiology: Adjunct Methods and Critical Analysis of Therapeutic Options

Concentration area: 5131

Creation: 08/04/2021

Activation: 08/04/2021

Credits: 2

Workload:

Theory (weekly)	Practice (weekly)	Study (weekly)	Duration	Total
12	4	14	1 weeks	30 hours

Professors:

Fábio Sandoli de Brito Júnior

Alexandre Antonio Cunha Abizaid

Carlos Augusto Homem de Magalhães Campos

Henrique Barbosa Ribeiro

Objectives:

Objectives Discipline aimed at medical graduate students and other health professionals with scientific interest in the area of Hemodynamics and Interventional Cardiology. The main objective is to update and critically analyze the main diagnostic and therapeutic methods in Hemodynamics and Interventional Cardiology. At the end of the course, it is expected that the student will have improved his / her critical sense to interpret the diagnostic and treatment procedures, recognizing their potential and limitations.

Rationale:

Background: Hemodynamics and Interventional Cardiology have evolved significantly both from the point of view of diagnosis in the various heart diseases, as well as becoming an important therapeutic alternative for an increasing number of patients. As a result, it contributed to a reduction in mortality from cardiovascular diseases and a significant improvement in patients' quality of life. However, the rapid evolution of techniques and methodologies, as well as their increasing application in several recent scientific researches, has generated a significant knowledge gap in this area of Cardiology. Therefore, the understanding of the methods used for its investigation, as well as the development of an adequate critical analysis in the decision making to treat them are fundamental for the improvement of researchers in this wide area of cardiology.

Content:

CONTENTS: - The course will be offered annually. Profs. Hector Manuel Garcia-Garcia (Professor of Medicine - Georgetown University School of Medicine, United States of America); Eberhard Grube (Professor of Medicine, University Hospital Bonn, Germany) and Marco Costa (Professor of Medicine, Case Western Reserve University School of Medicine, United States of

America) will be associate professors of this discipline. Relevant topics will be addressed on:

1. Coronary angiography: importance, limitations and quantification of atherosclerotic burden.
2. Intravascular imaging methods focused on assessing the outcomes used in clinical studies.
3. Invasive coronary functional assessment with a focus on comparing methods and prognostic impact.
4. Drug-eluting stents focused on the evolution of materials, polymers and the main outcomes used in large studies.
5. Role of Interventional Cardiology in the treatment of coronary heart disease, including stable syndromes and acute coronary syndromes.
6. Interventional methods for the diagnosis and treatment of aortic valve disease.
7. Interventional methods for the diagnosis and treatment of mitral and tricuspid valve disease.
8. Percutaneous treatment of congenital heart diseases
9. Percutaneous treatment methods to prevent embolic events
10. Minimally invasive methods for the diagnosis, monitoring and interventional treatment of patients with advanced heart failure.

Type of Assessment:

See observation field.

Notes/Remarks:

EVALUATION AND CERTIFICATION CRITERIA: Frequency, use and participation during classes and discussions (the responsible teachers encourage and are present in all classes), in addition to performance in the preparation, content and presentation of seminars. COMMENTS: Minimum number of students: 04 Maximum number of students: 12

Bibliography:

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2. Abizaid A, Ormiston JA, Fajadet J, et al. Two-year follow-up of the NEVO ResElution-I (NEVO RES-I) trial: a randomised, multicentre comparison of the NEVO sirolimus-eluting coronary stent with the TAXUS Liberté paclitaxel-eluting stent in de novo native coronary artery lesions. *EuroIntervention* : journal of EuroPCR in collaboration with the Working Group on Interventional Cardiology of the European Society of Cardiology 2013;9:721-9.
3. Ali ZA, Karimi Galougahi K, Shlofmitz R, et al. Imaging-guided pre-dilatation, stenting, post-dilatation: a protocolized approach highlighting the importance of intravascular imaging for implantation of bioresorbable scaffolds. *Expert Rev Cardiovasc Ther* 2018;16:431-40.
4. Bernardi FL, Ribeiro HB, Carvalho LA, et al. Direct Transcatheter Heart Valve Implantation Versus Implantation With Balloon Predilatation: Insights From the Brazilian Transcatheter Aortic Valve Replacement Registry. *Circ Cardiovasc Interv* 2016;9.
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6. Campos CM, Suwannasom P, Nakatani S, Onuma Y, Serruys PW, Garcia-Garcia HM. Short- and Long-term Evaluation of Bioresorbable Scaffolds by Optical Coherence Tomography. *Interv Cardiol Clin* 2015;4:333-49.
7. de Brito FS, Jr., Carvalho LA, Sarmiento-Leite R, et al. Outcomes and predictors of mortality after transcatheter aortic valve implantation: results of the Brazilian registry. *Catheter Cardiovasc Interv* 2015;85:E153-62.
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10. Iqbal J, Onuma Y, Ormiston J, Abizaid A, Waksman R, Serruys P. Bioresorbable scaffolds: rationale, current status, challenges, and future. *Eur Heart J* 2014;35:765-76.
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13. Ribeiro EE, Campos CM, Ribeiro HB, et al. First-in-man randomised comparison of a novel sirolimus-eluting stent with abluminal biodegradable polymer and thin-strut cobalt-chromium alloy: INSPIRON-I trial. *EuroIntervention* : journal of EuroPCR in collaboration with the Working Group on Interventional Cardiology of the European Society of Cardiology

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Class type:

Presencial