Discipline MCP5836
Valvular Heart Disease: From Patophysiologic Mechanisms to Critical Appraisal of Therapeutic Options

Concentration area: 5131

Creation: 11/07/2019

Activation: 11/07/2019

Credits: 2

Workload:

<table>
<thead>
<tr>
<th>Theory (weekly)</th>
<th>Practice (weekly)</th>
<th>Study (weekly)</th>
<th>Duration</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td>4</td>
<td>14</td>
<td>1 weeks</td>
<td>30 hours</td>
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</tbody>
</table>

Professor:

Flavio Tarasoutchi

Objectives:

OBJECTIVES: To promote a comprehensive vision on essential aspects of the natural history of valvular heart disease, highlighting pathophysiologic mechanisms related to ventricular remodeling and pulmonary hypertension, as well as factors that determine a new dimension of imaging procedures. Particular concerns of the course includes: • the cellular, neurohumoral and muscular mechanisms that interact in the evolution of left ventricular remodeling in chronic valvular heart disease. • Mechanisms of progression to irreversible pulmonary hypertension linked to increased pulmonary vascular bed resistance and its effects on right ventricular function. • A critical view of accuracy in imaging methods in relation to clinical practice and recent advances in the noninvasive detection of myocardial fibrosis. • Mechanisms of improvement of cellular, neurohumoral and muscular function after intervention (transcatheter or surgical) left ventricular remodeling and under pharmacological influence.

Rationale:

RATIONALE: The themes that will be discussed are the fundamental basis for critical thinking about knowledge, skills and attitudes in the care of valvular heart disease patients. This theoretical and practical knowledge may be beneficial in other areas of Cardiology.

Content:

CONTENT: • Critical analysis of the fundamentals of the guidelines recommendations in Valvular Heart Disease. • Cardiopulmonary interaction in Mitral Valve Disease. Influence of hemodynamic and humoral factors on prognosis and therapeutics. Are the pulmonary alterations in mitral valve disease reversible? • Triggers for ventricular hypertrophy. • Study of the compartments involved in the response to volume or pressure overload: muscular, cellular, vascular and neurohumoral. • Interaction of neurohumoral, muscular and cellular mechanisms in left ventricular remodeling of chronic valvular heart disease. • Mitral Regurgitation and practical approach of left ventricular remodeling. • Mechanical and hemodynamic factors associated with correction of valvular heart disease and left ventricular remodeling. • Practical aspects of the therapeutic approach of patients with ventricular
dysfunction secondary to valvular heart disease. • Practical approach to postoperative ventricular remodeling. • Transcatheter treatment of Aortic Stenosis

Type of Assessment:

EVALUATION: Frequency to classes and concept in seminars.

Notes/Remarks:

NOTE: Minimum number of students: 04 Maximum number of students: 12

Bibliography: