

	<b>Valvular Heart Disease</b> <span style="float: right;">August 16, 2006</span>
<b>Module Rationale and Competencies</b>	<p>In contemporary practice the assessment of the Cardiothoracic patient requires a thorough understanding of the natural history of Valvular Disease. The role of currently available cardiac investigations and the indications for therapies currently utilised in cardiovascular disease must be appreciated.</p> <p>The Graduating Trainee will be able to:</p> <ul style="list-style-type: none"> <li>▪ Apply scientific knowledge in practice</li> <li>▪ Take a history, examine, diagnose, perform (and/or arrange for) appropriate therapeutic procedures, and manage patients exhibiting valvular heart disease</li> <li>▪ Accurately identify risk factors associated with valvular heart disease</li> <li>▪ Select medically appropriate investigative tools to carry out clinical investigations and monitoring techniques in a cost-effective, ethical and effective manner</li> <li>▪ Communicate information to patients (and their family) in ways that encourage their participation in informed decision making.</li> <li>▪ Manage patients (operatively and non-operatively) with valvular heart disease</li> </ul>
<b>Essential Reading</b>	<p>Kirklın/Barratt-Boyes Cardiac Surgery: Morphology, Diagnostic Criteria, Natural History, Techniques, Results, and Indications  Nicholas T. Kouchoukos (Editor), Churchill Livingstone (November 2003)</p>
<b>Recommended Reading</b>	<p>Glenn's Thoracic and Cardiovascular Surgery (6th edition) Authors: Arthur E. Baue (Editor), Hillel Laks (Editor),  Mastery of Cardiac Surgery ISBN: 0316482102  Cardiac Surgery in the Adult Lawrence H. Cohn &amp; L. Henry Edmunds</p>
<b>References</b>	<p><a href="http://www.ctsnet.org/">http://www.ctsnet.org/</a>  <a href="http://www.ctsnet.org/residents/ctsn/">http://www.ctsnet.org/residents/ctsn/</a></p>
<b>Learning Opportunities and Methods</b>	<p>Clinical-Ward teaching</p> <ul style="list-style-type: none"> <li>- supervised ward rounds with consultant surgeon</li> <li>- multidisciplinary meetings within each unit</li> <li>- clinical audit meetings within each unit</li> <li>- structured teaching programme within each unit including trainee presentations and journal club</li> </ul> <p>Clinical-Operating room teaching</p> <ul style="list-style-type: none"> <li>- structured programme for progression and assessment of surgical skills</li> <li>- assistance with and observation of methods and techniques used for complicated surgery</li> </ul> <p>Online Image Bank with Case Scenarios  Online access to current journals within each unit  Access to unit database for research purposes</p>
<b>Assessment and Examination</b>	<p>Self Assessment Tasks</p> <ul style="list-style-type: none"> <li>- multiple choice and short answer questions (have hyperlink)</li> </ul> <p>Essay Questions</p> <ul style="list-style-type: none"> <li>- set by and submitted regularly to unit's supervisor of surgical training</li> </ul> <p>Clinical Vivas</p> <ul style="list-style-type: none"> <li>- short and long cases performed with consultant surgeons</li> </ul> <p>Clinical Assessment and Mentor Reports</p>

Level One	Level Two	Level Three	Level Four
<ul style="list-style-type: none"> <li>• Interpret echocardiographic, CT, MRI and radiographic anatomy of heart valves</li> <li>• Discuss the development of degenerative, rheumatic, inflammatory and infective valvular heart disease</li> <li>• Describe the normal and variant anatomy of cardiac valves</li> <li>• Describe the physiology of normal valves and the derangements caused by stenosis and regurgitation</li> <li>• Review the risks and benefits of imaging modalities</li> <li>• Select medically appropriate investigative tools to carry out clinical investigations and monitoring techniques in a cost-effective, ethical and effective manner</li> <li>• Take a history, examine, diagnose patients exhibiting valvular heart disease</li> <li>• Apply their thorough knowledge of the anatomy, physiology, and pathology of disorders of valvular heart disease to accurately diagnose and effectively manage patients</li> <li>• Carry out the pre and postoperative care of patients undergoing surgery for valvular heart disease</li> </ul>	<ul style="list-style-type: none"> <li>• Accurately identify the risks and benefits of the chosen management plan and its alternatives</li> <li>• Explain the indications and timing of surgery for valvular heart disease</li> </ul>	<ul style="list-style-type: none"> <li>• Perform (and/or arrange for) appropriate therapeutic procedures, and manage patients exhibiting valvular heart disease</li> <li>• Communicate information about procedures and risks in relation to valvular heart disease to patients (and/or their family) in ways that encourage their participation in informed decision making and on-going management</li> <li>• Facilitate the learning of others</li> <li>• Advocate patient health along with primary and secondary prevention of disease</li> </ul>	<ul style="list-style-type: none"> <li>• Interpret and discuss the available literature regarding the outcomes of interventions for valvular heart disease</li> <li>• Manage patients (operatively and non-operatively) with valvular heart disease</li> <li>• Summarise the rationale for and explain the surgery for valvular heart disease and the use of various prostheses and homografts</li> </ul>
<ul style="list-style-type: none"> <li>• Evaluate patients with valvular heart disease</li> <li>• Read and interpret invasive and non invasive tests of patients with valvular heart disease</li> <li>• Direct the critical care management of pre and post operative patients with valvular heart disease</li> </ul>	<ul style="list-style-type: none"> <li>• Perform operative and non-operative management of patients with valvular heart disease</li> <li>• Participate in and perform evaluation of transthoracic and transoesophageal echocardiograms</li> </ul>	<ul style="list-style-type: none"> <li>• Perform operative and non-operative management of patients with valvular heart disease</li> <li>• Participate in and perform evaluation of intraoperative echo</li> </ul>	<ul style="list-style-type: none"> <li>• Perform operative and non-operative management of patients with valvular heart disease</li> <li>• Participate in and perform surgery for infective endocarditis</li> </ul>