

<b>MODULE TITLE:</b>	<b>UPPER GI &amp; HPB - OESOPHAGO-GASTRIC</b>	<b>7-Nov-2016</b>
<b>DEVELOPED BY:</b>	<b>Chris Christophi, Mark Smithers</b>	
<b>REVIEWED BY:</b>	<b>Tom Wilson, Michael Donovan (2010) Adrian Anthony, Simon Bann, Wendy Brown, Jon Gani, Sayed Hassen, Michael Cox, Noel Tait (2013). Simon Bann, Sayed Hassen (2016).</b>	
<b>Module Rationale and Objectives</b>	<p>A general surgeon is required to have a thorough understanding of normal anatomy and physiology, as well as pathophysiology, investigations, differential diagnosis and surgical and non-surgical management of abdominal disorders. It is important that general surgeons maintain a current understanding of the most appropriate time and manner of intervention. It is also important that they keep abreast of the most current developments in investigative and surgical procedures.</p> <p>The graduating trainee will be able to:</p> <ul style="list-style-type: none"> <li>▪ describe common surgical pathologies of the foregut and associated structures</li> <li>▪ identify and recognise the symptoms and signs of these conditions</li> <li>▪ describe and select appropriate diagnostic testing</li> <li>▪ identify appropriate treatment options, and their indications and contraindications</li> <li>▪ diagnose and manage pathological conditions that pertain to the foregut</li> <li>▪ effectively manages patients</li> <li>▪ maintains skills and learns new skills</li> <li>▪ analyses their own clinical performance for consistent improvement</li> <li>▪ recognise the need to refer patients to other professionals</li> <li>▪ communicate information to patients (and their family) about procedures, outcomes, and risks associated with surgery in ways that encourage their participation in informed decision making (consent)</li> </ul>	
<b>Anatomy, Physiology, Pathology</b>	<p>Trainees should have thorough knowledge of the normal embryology, anatomy, physiology and pathology, of:</p> <ul style="list-style-type: none"> <li>▪ foregut</li> </ul>	
<b>Suggested Reading</b>	<p>Trainees who are preparing to sit the Generic and Clinical Examinations need to refer to the recommended reading list on the RACS website at <a href="http://www.surgeons.org">www.surgeons.org</a></p> <p>For the Fellowship examination, there are no prescribed texts.</p> <p>Trainees are expected to keep abreast of the current literature, including textbooks, journal articles, consensus guidelines and other on-line resources.</p>	
<b>Learning Opportunities and Methods</b>	<p>If state-based and/or local hospital courses/meetings are available, trainees are strongly advised to avail themselves of these opportunities. This also includes practising procedures on simulation equipment where applicable.</p> <p>Trainees are encouraged to present their research at national and/or accredited regional training days, in order to fulfil the research requirement.</p>	
<b>How this module will be assessed</b>	<p>The Generic and Clinical Examinations; Fellowship examination (written and viva voce sections); Trainee evaluation forms and logbooks; SEAM (where applicable).</p>	
<b>Assumed Knowledge</b>	<ul style="list-style-type: none"> <li>▪ Embryology, anatomy and physiology of the foregut</li> </ul>	
<b>Definitions</b>	<p><i>Operative Management - Knows:</i> Trainees are required to be familiar with the indications, benefits and limitations of the procedure; trainees should be able to describe the relevant operative techniques involved in performing the procedure; trainees are encouraged to at least observe and preferably assist in these procedures.</p> <p><i>Operative Management - Does:</i> In addition to the above, trainees must be competent at performing the procedure.</p>	

SET LEVEL	MEDICAL EXPERTISE	JUDGEMENT / CLINICAL DECISION MAKING			TECHNICAL EXPERTISE	
	ANATOMY PHYSIOLOGY PATHOLOGY	CLINICAL ASSESSMENT	INVESTIGATIONS	PRINCIPLES OF MANAGEMENT	OPERATIVE MANAGEMENT - KNOWS -	OPERATIVE MANAGEMENT - DOES -
<b>OESOPHAGUS</b>						
<b>Gastro-oesophageal reflux (GOR) disease and Hiatus hernia/paraoesophageal hernia</b>						
Early SET	<ul style="list-style-type: none"> <li>Describe embryology, anatomy, and physiology of the oesophagus</li> <li>Describe manometric associations</li> </ul>	<ul style="list-style-type: none"> <li>Assess and differentiate the clinical symptoms</li> </ul>				
Mid SET	<ul style="list-style-type: none"> <li>Describe complications including stricture, respiratory symptoms and Barrett's</li> <li>Describe acute of presentation of strangulated Hiatus hernia</li> </ul>		<ul style="list-style-type: none"> <li>Outline the role of: <ul style="list-style-type: none"> <li>gastroscopy</li> <li>manometry</li> <li>24 Hr pH studies</li> <li>barium swallow</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Review the principles of non-operative/medical management</li> <li>Establish: <ul style="list-style-type: none"> <li>indications</li> <li>options</li> <li>complications of operative management</li> </ul> </li> </ul>		<ul style="list-style-type: none"> <li>Endoscopic assessment of GOR</li> </ul>
Late SET				<ul style="list-style-type: none"> <li>Management of incarcerated Hiatus hernia</li> </ul>	<ul style="list-style-type: none"> <li>Laparoscopic/ open fundoplication</li> </ul>	
<b>Oesophageal strictures:</b>						
<ul style="list-style-type: none"> <li>peptic and corrosive strictures</li> <li>Schatzki ring and webs</li> </ul>						
Early SET	<ul style="list-style-type: none"> <li>Describe the lesion and aetiology when known</li> </ul>	<ul style="list-style-type: none"> <li>Assess the clinical symptoms</li> </ul>				
Mid SET			<ul style="list-style-type: none"> <li>Analyse the role of gastroscopy and barium swallow</li> </ul>	<ul style="list-style-type: none"> <li>Implement the principles of non-operative, endoscopic and operative management</li> </ul>		<ul style="list-style-type: none"> <li>Endoscopic assessment of the stricture</li> <li>Endoscopic dilatation</li> </ul>
<b>Oesophageal malignancies</b>						
Early SET	<ul style="list-style-type: none"> <li>Describe the aetiology and pathology</li> <li>Identify prognostic factors</li> </ul>	<ul style="list-style-type: none"> <li>Recognise the clinical presentations</li> <li>Examine and assess the clinical staging</li> <li>Medical assessment</li> </ul>	<ul style="list-style-type: none"> <li>Define the role of gastroscopy</li> <li>Define the role of radiological investigations</li> </ul>	<ul style="list-style-type: none"> <li>Outline the multi-disciplinary approach to management</li> </ul>		
Mid SET				<ul style="list-style-type: none"> <li>Define the methods of palliation</li> <li>Patient and family counselling</li> <li>Outline management of the post-resection functional problems</li> <li>Outline management of high grade dysplasia</li> </ul>	<ul style="list-style-type: none"> <li>Resection/reconstruction options</li> <li>Palliative stenting</li> </ul>	<ul style="list-style-type: none"> <li>Endoscopic diagnosis and assessment</li> <li>Feeding jejunostomy</li> <li>Laparoscopic staging</li> </ul>
<b>Other tumours</b>						
Early SET	<ul style="list-style-type: none"> <li>Describe other benign tumours of the oesophagus</li> </ul>	<ul style="list-style-type: none"> <li>Recognise the clinical presentations</li> </ul>	<ul style="list-style-type: none"> <li>Define the role of gastroscopy, EUS, medical imaging</li> </ul>	<ul style="list-style-type: none"> <li>Define the management of these tumours</li> </ul>		

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<b>Other tumours (continued)</b>						
Mid SET					▪ Endoscopic diagnosis and assessment	
<b>Motility disorders</b>						
Early SET	▪ Define the pathological abnormalities	▪ Describe the clinical presentation	▪ Describe the role of gastroscopy, barium swallow, and manometry			
Mid SET				▪ Describe the principles of management of the relevant conditions	▪ Endoscopic assessment and management options	
Late SET					▪ Laparoscopic Heller's myotomy	
<b>Oesophageal varices</b>						
Early SET	▪ Knowledge of the aetiology and associated pathology					
Mid SET		▪ Differentiate the clinical features of a variceal bleeding from other causes of upper GI bleeding ▪ Define the extent of underlying liver disease	▪ Describe the role of gastroscopy ▪ Describe the laboratory assessment of the severity of the associated liver disease	▪ Outline the various forms of treatment: - endoscopic assessment and therapies - radiological stenting (TIPPS) - operative shunts ▪ Management of the underlying liver disease		▪ Endoscopic assessment
<b>Oesophageal foreign bodies</b>						
Early SET	▪ Define the pathological abnormalities	▪ Assess the clinical presentation	▪ Differentiate the role of gastroscopy and medical imaging	▪ Describe the endoscopic therapies and the management of complications (perforation) ▪ Define the follow-up management		
Mid SET						▪ Endoscopic assessment and removal
<b>Oesophageal perforation</b>						
Early SET	▪ Describe the aetiology and associated pathology	▪ Describe the clinical presentation	▪ Define the role of medical imaging and laboratory investigations	▪ Define the diagnosis and describe the principles of therapy: - options to treat the injury - management of the associated sepsis		

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<b>Oesophageal perforation (continued)</b>						
Mid SET				<ul style="list-style-type: none"> <li>Outline assessment of appropriate transfer to specialist centre</li> </ul>		
Late SET					<ul style="list-style-type: none"> <li>Operative repair, endoscopic stenting</li> </ul>	
<b>STOMACH</b>						
<b>Peptic ulcers (gastric and duodenal)</b>						
Early SET	<ul style="list-style-type: none"> <li>Describe embryology, anatomy, and physiology of the stomach and duodenum (foregut component)</li> <li>Describe the pathophysiology of benign peptic ulcer disease</li> <li>Recognise and review the complications: <ul style="list-style-type: none"> <li>bleeding</li> <li>perforation</li> <li>stricture</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Describe and differentiate the clinical symptoms and signs</li> <li>Outline assessment of patients with complications</li> </ul>	<ul style="list-style-type: none"> <li>Define the role of gastroscopy: <ul style="list-style-type: none"> <li>elective</li> <li>emergency</li> </ul> </li> <li>Investigations relevant to Helicobacter Pylori</li> </ul>	<ul style="list-style-type: none"> <li>Define the medical management of uncomplicated peptic ulcers, including Helicobacter eradication</li> <li>Define the techniques used to treat bleeding peptic ulcers</li> </ul>		
Mid SET				<ul style="list-style-type: none"> <li>Summarise the principles of management of complications: <ul style="list-style-type: none"> <li>bleeding</li> <li>perforation</li> <li>stricture</li> </ul> </li> </ul>		<ul style="list-style-type: none"> <li>Endoscopic assessment: <ul style="list-style-type: none"> <li>elective</li> <li>emergency</li> </ul> </li> <li>Management of complications (open/lap/endo) operations): <ul style="list-style-type: none"> <li>bleeding</li> <li>perforation</li> <li>stricture</li> <li>difficult duodenum</li> </ul> </li> </ul>
Late SET						<ul style="list-style-type: none"> <li>Techniques of endoscopic haemostasis</li> </ul>
<b>Gastric carcinoma</b>						
Early SET	<ul style="list-style-type: none"> <li>Describe pathophysiology and the pathological staging</li> </ul>	<ul style="list-style-type: none"> <li>Describe and differentiate the clinical symptoms and signs of gastric carcinoma and other upper GI conditions</li> </ul>	<ul style="list-style-type: none"> <li>Define the role of gastroscopy, imaging, and staging laparoscopy in the assessment</li> </ul>	<ul style="list-style-type: none"> <li>Outline the multi-disciplinary management</li> <li>Selection and pre-operative patient preparation</li> </ul>	<ul style="list-style-type: none"> <li>Total or subtotal gastrectomy and oesophago-gastrectomy</li> <li>Radical distal gastrectomy</li> </ul>	
Mid SET				<ul style="list-style-type: none"> <li>Describe the role of palliative surgical procedures</li> <li>Patient and family counselling</li> </ul>		<ul style="list-style-type: none"> <li>Endoscopic and laparoscopic staging</li> <li>Gastro-enterostomy</li> <li>Feeding jejunostomy</li> </ul>

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<b>Other gastric tumours e.g. GIST</b>						
<i>See also Surgical Oncology Module</i>						
Early SET	<ul style="list-style-type: none"> <li>Describe the pathology</li> </ul>	<ul style="list-style-type: none"> <li>Define the clinical symptoms and signs</li> </ul>				
Mid SET			<ul style="list-style-type: none"> <li>Outline the role of gastroscopy and medical imaging</li> </ul>	<ul style="list-style-type: none"> <li>Describe the principles of management</li> </ul>		<ul style="list-style-type: none"> <li>Endoscopic assessment</li> <li>Local gastric resection or distal gastrectomy (lap/open)</li> </ul>
Late SET				<ul style="list-style-type: none"> <li>Aware of role of adjuvant, neoadjuvant and palliative therapies</li> </ul>		<ul style="list-style-type: none"> <li>Laparoscopic and open wedge gastrectomy</li> </ul>