### Module Rationale and Objectives

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.

The graduating trainee will be able to:

- describe common surgical pathologies of the foregut and associated structures
- identify and recognise the symptoms and signs of these conditions
- describe and select appropriate diagnostic testing
- identify appropriate treatment options, and their indications and contraindications
- diagnose and manage pathological conditions that pertain to the foregut
- effectively manages patients
- maintains skills and learns new skills
- analyses their own clinical performance for consistent improvement
- recognise the need to refer patients to other professionals
- 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)

### Anatomy, Physiology, Pathology

Trainees should have thorough knowledge of the normal embryology, anatomy, physiology and pathology, of:

- foregut

### Suggested Reading

Trainees who are preparing to sit the Generic and Clinical Examinations need to refer to the recommended reading list on the RACS website at [www.surgeons.org](http://www.surgeons.org).

For the Fellowship examination, there are no prescribed texts.

Trainees are expected to keep abreast of the current literature, including textbooks, journal articles, consensus guidelines and other on-line resources.

### Learning Opportunities and Methods

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.

Trainees are encouraged to present their research at national and/or accredited regional training days, in order to fulfil the research requirement.

The Generic and Clinical Examinations; Fellowship examination (written and viva voce sections); Trainee evaluation forms and logbooks; SEAM (where applicable).

### How this module will be assessed

The Generic and Clinical Examinations; Fellowship examination (written and viva voce sections); Trainee evaluation forms and logbooks; SEAM (where applicable).

### Assumed Knowledge

- Embryology, anatomy and physiology of the foregut

### Definitions

**Operative Management - Knows:** 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.

**Operative Management - Does:** Trainees are encouraged to at least observe and preferably assist in these procedures. In addition to the above, trainees must be competent at performing the procedure.
### Oesophageal reflux (GOR) disease and Hiatus hernia/paraesophageal hernia

**Early SET**
- Describe embryology, anatomy, and physiology of the oesophagus
- Describe manometric associations
- Assess and differentiate the clinical symptoms

**Mid SET**
- Describe complications including stricture, respiratory symptoms and Barrett’s
- Describe acute of presentation of strangulated Hiatus hernia
- Outline the role of:
  - gastroscopy
  - manometry
  - 24 Hr pH studies
  - barium swallow
- Review the principles of non-operative/medical management
- Establish:
  - indications
  - options
  - complications of operative management

**Late SET**
- Management of incarcerated Hiatus hernia
- Laparoscopic/ open fundoplication

### Oesophageal strictures:
- peptic and corrosive strictures
- Schatzki ring and webs

**Early SET**
- Describe the lesion and aetiology when known
- Assess the clinical symptoms

**Mid SET**
- Analyse the role of gastroscopy and barium swallow
- Implement the principles of non-operative, endoscopic and operative management
- Endoscopic assessment of the stricture
- Endoscopic dilatation

### Oesophageal malignancies

**Early SET**
- Describe the aetiology and pathology
- Identify prognostic factors
- Recognise the clinical presentations
- Examine and assess the clinical staging
- Medical assessment
- Define the role of gastroscopy
- Define the role of radiological investigations
- Outline the multi-disciplinary approach to management

**Mid SET**
- Define the methods of palliation
- Patient and family counselling
- Outline management of the post-resection functional problems
- Outline management of high grade dysplasia
- Resection/reconstruction options
- Palliative stenting
- Endoscopic diagnosis and assessment
- Feeding jejunostomy
- Laparoscopic staging

### Other tumours

**Early SET**
- Describe other benign tumours of the oesophagus
- Recognise the clinical presentations
- Define the role of gastroscopy, EUS, medical imaging
- Define the management of these tumours
### Other tumours (continued)

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<tr>
<th>SET LEVEL</th>
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<tr>
<td></td>
<td>ANATOMY PHYSIOLOGY PATHOLOGY</td>
<td>CLINICAL ASSESSMENT</td>
<td>INVESTIGATIONS</td>
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<td>Mid SET</td>
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<td>Motility disorders</td>
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<tr>
<td>Early SET</td>
<td>• Define the pathological abnormalities</td>
<td>• Describe the clinical presentation</td>
<td>• Describe the role of gastroscopy, barium swallow, and manometry</td>
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<td>Mid SET</td>
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<td>Late SET</td>
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<td>Oesophageal varices</td>
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<tr>
<td>Early SET</td>
<td>• Knowledge of the aetiology and associated pathology</td>
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<tr>
<td>Mid SET</td>
<td>• Differentiate the clinical features of a variceal bleeding from other causes of upper GI bleeding</td>
<td>• Describe the role of gastroscopy</td>
<td>• Outline the various forms of treatment: - endoscopic assessment and therapies - radiological stenting (TIPPS) - operative shunts</td>
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<td>Oesophageal foreign bodies</td>
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<tr>
<td>Early SET</td>
<td>• Define the pathological abnormalities</td>
<td>• Assess the clinical presentation</td>
<td>• Differentiate the role of gastroscopy and medical imaging</td>
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<td>Mid SET</td>
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<td>Oesophageal perforation</td>
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<tr>
<td>Early SET</td>
<td>• Describe the aetiology and associated pathology</td>
<td>• Describe the clinical presentation</td>
<td>• Define the role of medical imaging and laboratory investigations</td>
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</table>
### Oesophageal perforation (continued)

**Mid SET**
- Outline assessment of appropriate transfer to specialist centre

**Late SET**
- Operative repair, endoscopic stenting

### STOMACH

**Peptic ulcers (gastric and duodenal)**

**Early SET**
- Describe embryology, anatomy, and physiology of the stomach and duodenum (foregut component)
- Describe the pathophysiology of benign peptic ulcer disease
- Recognise and review the complications: bleeding, perforation, stricture
- Outline assessment of patients with complications
- Define and differentiate the clinical symptoms and signs
- Define the role of gastroscopy: elective, emergency
- Investigations relevant to Helicobacter Pylori
- Define the techniques used to treat bleeding peptic ulcers

**Mid SET**
- Summarise the principles of management of complications: bleeding, perforation, stricture

**Late SET**
- Endoscopic assessment: elective, emergency
- Management of complications (open/lap/endo) operations: bleeding, perforation, stricture, difficult duodenum

### Gastric carcinoma

**Early SET**
- Describe pathophysiology and the pathological staging
- Describe and differentiate the clinical symptoms and signs of gastric carcinoma and other upper GI conditions
- Define the role of gastroscopy, imaging, and staging laparoscopy in the assessment
- Define the multi-disciplinary management
- Selection and pre-operative patient preparation
- Total or subtotal gastrectomy and oesophago-gastrectomy
- Radical distal gastrectomy

**Mid SET**
- Describe the role of palliative surgical procedures
- Patient and family counselling

**Late SET**
- Endoscopic and laparoscopic staging
- Gastro-enterostomy
- Feeding jejunostomy
Other gastric tumours e.g. GIST

*See also Surgical Oncology Module*

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<td>• Outline the role of gastroscopy and medical imaging</td>
<td>• Describe the principles of management</td>
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<td>• Aware of role of adjuvant, neoadjuvant and palliative therapies</td>
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