

## **CORE SURGICAL SKILLS**

# Module 5 : Core Surgical Skills

## Learning outcomes:

- To understand and demonstrate appropriate knowledge, skills and attitudes in relation to basic surgical skills.

Knowledge criteria	Clinical competency	Professional skills and attitudes	Training support	Evidence/assessment
<ul style="list-style-type: none"> <li>■ Legal issues around consent to surgical procedures, including consent of children, adults with incapacity and adults and children in emergency situations</li> <li>■ Name and mode of use of common surgical instruments and sutures</li> <li>■ Complications of surgery</li> <li>■ Regional anatomy and histology</li> <li>■ Commonly encountered infections, including an understanding of the principles of infection control</li> <li>■ Principles of nutrition, water, electrolyte and acid base balance and cell biology</li> <li>■ Appropriate use of blood and blood products</li> <li>■ General pathological principles</li> </ul>	<ul style="list-style-type: none"> <li>■ Interpret preoperative investigations</li> <li>■ Arrange preoperative management</li> <li>■ Recognise potential comorbidity</li> <li>■ Obtain valid consent</li> <li>■ Explain procedures to patient</li> <li>■ Advise patient on postoperative course</li> <li>■ Within agreed level of competency for the procedure you may:               <ul style="list-style-type: none"> <li>■ Choose appropriate operation</li> <li>■ Exhibit technical competence</li> <li>■ Make intraoperative decisions</li> <li>■ Manage intraoperative problems</li> <li>■ Communicate with colleagues and relatives</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>■ Recognise the need for and initiate collaboration with other disciplines, before, during and after surgery</li> <li>■ Demonstrate the ability to select the operative procedure with due regard to degree of urgency, likely pathology and anticipated prognosis</li> <li>■ Have an awareness of the need to meet national targets</li> <li>■ Develop the ability to work under pressure and recognise own limitations</li> <li>■ Show the need to appreciate and recognise that decision making is a collaborative process between doctor and patient</li> </ul>	<ul style="list-style-type: none"> <li>■ Basic practical skills in o &amp; g course (RCOG approved)               <ul style="list-style-type: none"> <li>■ Basic surgical workshop</li> <li>■ Basic Gynaecological Endoscopic Surgery (GES) workshop</li> <li>■ Intermediate Gynaecological Endoscopic Surgery (GES) workshop</li> </ul> </li> <li>■ Obtaining Valid Consent (RCOG, October 2004)</li> <li>■ RCOG Consent Advice series</li> <li>■ DH website</li> <li>■ Local courses</li> <li>■ StratOG.net: The Obstetrician and Gynaecologist as a Professional. Ethical and legal issues e-tutorial</li> </ul>	<ul style="list-style-type: none"> <li>■ Logbook</li> <li>■ Audit project</li> <li>■ MRCOG – parts 1 and 2</li> <li>■ OSATS: opening and closing abdomen</li> </ul>

## Appendix to Curriculum Module 5: Details of Knowledge Criteria

- Legal issues around consent to surgical procedures, including consent of minors (and Fraser competency), adults with incapacity and adults and children in emergency situations.
- Name and mode of use of common surgical instruments.
- Knowledge of sutures and their appropriate use.
- Prevention and complications of surgery including:
  - venous thromboembolism
  - infection (wound, urinary tract, respiratory, intra-abdominal and pelvic)
  - primary and secondary haemorrhage (intraoperative and postoperative).
- Relevant clinical anatomy.
- Relevant bones, joints, muscles, blood vessels, lymphatics, nerve supply and histology.
- Characteristics, recognition, prevention, eradication and pathological effects of all commonly encountered bacteria, viruses, Rickettsia, fungi, protozoa, parasites and toxins, including an understanding of the principles of infection control.
- Principles of nutrition, water, electrolyte and acid base balance and cell biology.
- Knowledge and awareness of anaesthesia: general anaesthetic, conscious sedation, regional and local.
- General pathological principles, including general, tissue and cellular responses to trauma, infection, inflammation, therapeutic intervention (especially by the use of irradiation, cytotoxic drugs and hormones), disturbances in blood flow, loss of body fluids, hyperplasia and neoplasia.
- Knowledge and awareness of use in complications of diathermy and other energy sources

## Module 5 : Core Surgical Skills

Fill in as a record of experience.

Skills	Competence level						
	<input type="checkbox"/>	Basic training	<input type="checkbox"/>	Intermediate training	<input type="checkbox"/>	Advanced training	<input type="checkbox"/>
	Observation		Direct supervision		Independent practice		
	Date	Signature of trainer	Date	Signature of trainer	Date	Signature of trainer	
Interpret preoperative investigations							
Arrange preoperative management							
Obtain informed consent							
Choose appropriate operation							
Open and close the abdomen							
Exhibit technical competence							
Make appropriate operative decisions							
Manage intraoperative problems							

**Authorisation of signatures (to be completed by the clinical trainers)**

Name of clinical trainer (please print)	Signature of clinical trainer

<b>OSATS</b>	Record all formal assessments until trainee passess. Record date of satisfactory assessment.									
<b>Opening and closing the abdomen</b>	Date		Date		Date		Date		Date	
	Signature		Signature		Signature		Signature		Signature	

**COMPLETION OF MODULE 5**

**I confirm that all components of the module have been successfully completed:**

Date	Name of educational supervisor	Signature of educational supervisor

# OPENING AND CLOSING THE ABDOMEN

Trainee Name:	StR Year:	Date:
Assessor Name:	Postr:	
<b>Clinical details of complexity/ difficulty of case</b>		

	Performed independently	Needs help
<b>Items under observation: opening</b>		
Appropriate preoperative preparation: bladder empty, prepare and drape abdomen		
Appropriate skin incision (e.g. length, position) with safe use of surgical knife		
Subcutaneous fascia opened with attention to haemostasis		
Rectus sheath incised either side of linea alba, extended with scissors and dissected off rectus muscle with attention to haemostasis		
Safe entry of peritoneal cavity by either sharp or blunt dissection		
<b>Item under observation: closing</b>		
Identification of peritoneal edge and closure (optional) using appropriate suture material, instruments and technique		
Ensure haemostasis of peritoneum and posterior surface of rectus sheath		
Secure closure of rectus sheath using appropriate suture material, instruments and technique for knot tying and placement of sutures		
Ensure haemostasis before skin closure		
Accurate skin closure using appropriate method, instruments and technique (trainees should demonstrate competence in the full range of closure methods)		
Appropriate and safe use of needle holder: needle loaded correctly, no touch technique, no inappropriate movements		
<b>Comments (please state skin closure method)</b>		

## Examples of minimum levels of complexity for each stage of training

### Basic Training

patient with no previous lower transverse incision  
patient with previous lower transverse incision but without suspicion  
of severe abdominal adhesions

### Advanced

patient with previous abdominal surgery and likely severe abdominal  
adhesions

*Both sides of this form to be completed and signed*

# GENERIC TECHNICAL SKILLS ASSESSMENT

Assessor, please ring the candidate's performance for each of the following factors:

<b>Respect for tissue</b>	Frequently used unnecessary force on tissue or caused damage by inappropriate use of instruments.	Careful handling of tissue but occasionally causes inadvertent damage.	Consistently handled tissues appropriately with minimal damage.
<b>Time, motion and flow of operation and forward planning</b>	Many unnecessary moves. Frequently stopped operating or needed to discuss next move.	Makes reasonable progress but some unnecessary moves. Sound knowledge of operation but slightly disjointed at times.	Economy of movement and maximum efficiency. Obviously planned course of operation with effortless flow from one move to the next.
<b>Knowledge and handling of instruments</b>	Lack of knowledge of instruments.	Competent use of instruments but occasionally awkward or tentative.	Obvious familiarity with instruments.
<b>Suturing and knotting skills as appropriate for the procedure</b>	Placed sutures inaccurately or tied knots insecurely and lacked attention to safety.	Knotting and suturing usually reliable but sometimes awkward.	Consistently placed sutures accurately with appropriate and secure knots and with proper attention to safety.
<b>Technical use of assistants</b>	Consistently placed assistants poorly or failed to use assistants. Communicated poorly or frequently showed lack of awareness of the needs of the patient and/or the professional team.	Appropriate use of assistant most of the time. Reasonable communication and awareness of the needs of the patient and/or of the professional team.	Strategically used assistants to the best advantage at all times. Consistently communicated and acted with awareness of the needs of the patient and/or of the professional team.
<b>Insight/attitude</b>	Poor understanding of areas of weakness.	Some understanding of areas of weakness.	Fully understands areas of weakness.
<b>Documentation of procedures</b>	Limited documentation, poorly written.	Adequate documentation but with some omissions or areas that need elaborating.	Comprehensive legible documentation, indicating findings, procedure and postoperative management.

Based on the checklist and the Generic Technical Skills Assessment, Dr ..... has achieved/failed\* to achieve the OSAT competency

Needs further help with: * *	Competent to perform the entire procedure without the need for supervision
Date	Date
Signed (trainer)	Signed
Signed (trainee)	Signed

Delete where applicable, and date and sign the relevant box