Curriculum for Subspecialty Training in Gynaecological Oncology

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Module 1 General Assessment of a Gynaecological Oncology Patient

Objectives
To demonstrate the knowledge, skills and attitudes required to make an appropriate clinical assessment of a patient with a suspected or known gynaecological cancer:
- Obtain an appropriate history.
- Perform an appropriate examination.
- Communicate results of prior investigations.
- Initiate further investigations.
- Communicate clinical plan to patient and relatives.

Knowledge Criteria
A broad knowledge of the pattern of presentation of gynaecological malignancies.
Knowledge of investigations required confirming diagnosis of gynaecological malignancy.
Preoperative investigation of patients, including radiology, assessment of fitness for surgery.
Understanding of the indications and limitations of screening for gynaecological cancer:
- Cervix
- Ovary (general and high-risk populations)
- Endometrium (hereditary nonpolyposis colorectal cancer).

Clinical Competency
Take an appropriate history:
- Symptoms and comorbidity
- Family history and genetic susceptibility.
Perform a clinical examination.
Counsel patients about the diagnosis, investigations and appropriate treatments for gynaecological cancer including adverse effects and complications of treatment.
Communicate to patients the results of investigations and treatment, including prognosis.
Anticipate results of radiological investigations.
Counsel appropriately about screening and interpret screening results.

Professional Skills and Attitudes
Ability to take a history and perform an appropriate examination.
Ability to counsel patients regarding a diagnosis of gynaecological malignancy and the subsequent management.
Ability to initiate preoperative work-up and staging investigations.
Ability to identify the high-risk surgical patient and liaise with anaesthetists.
Ability to liaise with clinical oncology, medical oncology and palliative care colleagues when appropriate.
Counselling skills and knowledge of screening process.

Training Support
- Observation of assisting and discussion with senior staff.
- Communication skills course.
- Specific task training and supervision.
- Appropriate postgraduate course.

Evidence
- Logbook.
- Mini-CEX
- Case-based discussions.
- British Society for Colposcopy and Cervical Pathology/RCOG accreditation.
Module 2 Pre-, Peri- and Postoperative Care Objectives

Objectives
To understand and demonstrate appropriate knowledge, skills and attitudes in relation to patients undergoing surgery for gynaecological malignancies:
- plan appropriate surgery.
- identify surgical and anaesthetic risks.
- prepare patients for surgery.
- manage peri-, intra- and postoperative complications.
- nutrition and total parenteral nutrition (TPN).

Knowledge Criteria
Type of surgery appropriate for each gynaecological cancer (see separate modules).
Fluid and electrolyte balance.
Elemental feeding and TPN.

Clinical Competency
Counsel patients regarding diagnosis, management and risks of treatment.
Recognise and manage intraoperative complications.
Postoperative care and complications arising.

Manage the following clinical problems:
- Intraoperative:
  - haemorrhage
  - bowel resection
  - unexpected finding
  - inoperability.
- Postoperative:
  - thrombosis
  - infection
  - bowel obstruction.

Inform patient of results.

Appropriately order and interpret investigations:
- Haematological investigations
  - Manage fluid balance perioperatively

Order and supervise appropriate thromboprophylaxis.
Liaise with nutritional support team.

Decide when TPN or enteral feeding is appropriate.

Professional Skills And Attitudes
Ability to interpret preoperative investigations and liaise with the anaesthetic department.
Ability to counsel patients regarding treatment options.
Ability to select and perform appropriate surgical management of gynaecological cancer according to patient's needs.
Ability to manage postoperative care and complications thereof.
Ability to counsel patients and relatives regarding diagnosis, investigations and to discuss treatment options, advantages and disadvantages of each.
Ability to convey decisions of multidisciplinary team meeting to patients and relatives, including prognosis and palliative care.
Ability to liaise with colleagues and other health professionals regarding coordinating investigations and management strategies pertinent to individual patients.

Ability to order and interpret:
- Fluid balance
- Blood investigations: U&E, FBC, LFT.

Ability to prescribe thromboprophylaxis.

Ability to assess patient and establish when enteral feeding or TPN is required.

Training Support
- Direct supervision from senior colleagues.
- Attendance at multidisciplinary team meetings.
- Ward attendance.
- Supervision in operating theatre.
- Intensive care and high-dependency unit ward rounds.
- Royal College of Surgeons’ Care of the Critically Ill Surgical Patient course.

Evidence
- Logbook
- Multidisciplinary team attendance
- Course assessment
- OSATS
- Mini-CEX
- Case-based discussions
- Audit of complications
Module 3 Generic Surgical Skills in Gynaecological Oncology

Objectives
To achieve surgical skills appropriate for a subspecialist gynaecological oncology surgeon:
- Anatomical knowledge.
- Surgical skills.
- Personal audit

Knowledge Criteria
Anatomy of the female abdomen and pelvis, including blood supply, lymphatic drainage, nervous system and the course of the ureter.

Clinical Competency
Surgical diagnosis and management of gynaecological cancers:
- Ovary
- Endometrium
- Cervix
- Vulva
- Vagina
- Fallopian tube.

Liaison with surgical colleagues for assistance in complicated cases.

Professional Skills And Attitudes
Ability to perform hysterectomy.

Ability to perform radical hysterectomy.

Ability to perform pelvic lymph node dissection (open and laparoscopically).

Ability to perform para-aortic lymph node dissection (open and laparoscopically).

Ability to perform infracolic and supracolic omentectomy.

Ability to perform fine-needle aspiration or biopsy of superficial lymph node.

Ability to perform Trucut biopsy.

Ability to perform (with the assistance of surgical colleagues if necessary; see modules 13 and 14):
- Exenterative surgery
- Urinary diversion procedures
- Ileostomy/colostomy.

Ability to organise anterior, posterior and total exenteration, including leading the surgical procedure.

Ability to initiate discussion of management at multidisciplinary team meeting.

Training Support
- Observation of assisting and discussion with senior staff.
- Direct and indirect surgical supervision of surgical skills to appropriate competency by surgical staff.
- Specific task training and supervision.
- Appropriate postgraduate course.

Evidence
- Logbook of competences and experience
- OSATS
- Case-based discussions
- Surgical logbook
- Audit of complications.
Module 4. Ovarian Cancer

Objectives
To understand and demonstrate appropriate skills and attitudes in relation to managing a patient with a diagnosis of presumed ovarian cancer (risk of malignancy index greater than 200).
- Initial assessment and investigations of suspected ovarian cancer.
- Plan subsequent management of suspected ovarian cancer.
- Perform appropriate diagnostic or treatment surgery.
- Communicate with multidisciplinary team and organise adjuvant treatment.
- Plan follow-up.

Knowledge Criteria
Aetiology and clinical presentations of ovarian cancer.
Pathology of ovarian cancer.
Indications, techniques, limitations and complications of surgical treatment of ovarian cancer.
Surgical pathway of suspected ovarian cancer (imaging, tumour markers).
Medical pathway of suspected ovarian cancer (histological and cytological diagnosis, neoadjuvant and adjuvant treatment).
Multidisciplinary team meeting discussions and management planning.
Radiological assessment for preoperative diagnosis and guided biopsy.
Role of laparoscopy in assessment.

Surgery:
- Case selection
- Primary surgery
- Interval debulking surgery
- Fertility conserving.

Medical management of ascites, pleural effusions and bowel obstruction.
Consideration of all management options including best supportive and palliative care.
Knowledge of the physical and psychosexual morbidity of cancer diagnosis and treatment.

Clinical Competency
Counsel patient and relatives about:
- Diagnosis and further therapy
- Surgical options and complications
- Medical options
- Prognosis.

Discuss results of the surgery with patient and relatives and carers.
Communicate with referral unit and primary care.
Perform appropriate surgery for diagnosis and surgical management of ovarian cancer, including optimal debulking surgery. (see module 3).

Management of recurrent disease.
Discharge from hospital and produce appropriate follow-up plan.
Detect and manage physical and psychosexual morbidity (e.g. referral to lymphoedema specialist nurse, psychotherapist or counsellor).

Professional Skills And Attitudes
Ability to counsel patients sensitively about the options available and to respect patient confidentiality.

Ability to explain clearly and openly about treatments, complications and adverse effects of surgical treatment.

Ability to formulate and implement a plan of management and modify if necessary.

Ability to liaise effectively with colleagues in other disciplines, clinical and non-clinical.

Ability to appropriately stage ovarian cancer.

Ability to perform optimal debulking surgery for ovarian cancer.

Ability to decide appropriate surgery, including resection of bowel and formation of stoma.

Ability to select patients for conservative surgery, e.g. unfit, stage-4 disease, very young (less than 35 years).

Ability to perform a laparoscopic assessment and biopsy in suspected advanced ovarian cancer to obtain histology.

Ability to counsel patients regarding entry into clinical trials.
Training Support

- Observation of, assisting and discussion with senior medical staff.
- Theatre attendance.
- Clinical pathology meetings and multidisciplinary team meetings.
- Personal study.
- Postgraduate education courses.
- Medical oncology sessions.
- Intensive care and high-dependency unit ward rounds.

Evidence

- Direct observation of clinical practice by trainers
- Logbook of competences and experience
- OSATS
- Mini-CEX
- Case-based discussions
- Chemotherapy module
- Colorectal module
Module 5 Cancer of the Uterus

Objectives
To understand and demonstrate appropriate skills and attitudes in relation to managing a patient with a diagnosis of uterine cancer.
- Undertake primary surgical management.
- Understand management options to address comorbidity.
- Manage recurrent disease.

Knowledge Criteria
Aetiological factors leading to endometrial cancer, including obesity, estrogens, genetic predisposition.
Histological types of endometrial cancer and prognostic implications.
Preoperative investigation of patients, including radiology, assessment of fitness for surgery.
Risk of major surgery (surgical and anaesthetic)
Preoperative care of patient undergoing major surgery for gynaecological cancer.
Type of surgery appropriate for endometrial cancer.
Role of radiotherapy in the treatment of endometrial cancer.
Inpatient clinical trials.
Recruitment into clinical trials.
Risk factors for recurrent disease
Patterns of recurrent disease.
Management options for recurrent disease.
Rare uterine tumours, e.g. sarcomas.

Clinical Competency
Take a history and investigate patients with suspected and proven endometrial cancer.
Histological diagnosis of endometrial cancer.
Order and interpret investigations of endometrial cancer (e.g. magnetic resonance imaging).
Formulate a management plan.
Ability to liaise with anaesthesia department.
To counsel patients regarding diagnosis, management and risks of treatment.

Perform appropriate surgery including:
- Opening and closing midline laparotomy
- Laparoscopic assessment of abdominal cavity
- Defining ureters and gonadal vessels
- Pelvic node dissection/sampling.
- Para-aortic node biopsy
- Salpingo-oophorectomy (bilateral).
Total hysterectomy.
Recognise and manage intraoperative complications.
Postoperative care and complications arising.
FIGO staging of tumour.
Inform patient of results.
Understand need for postoperative radiotherapy.
Liaise with clinical oncology.
Follow-up care.
Recognition of recurrence of disease.
Investigation of suspected recurrent disease.
Management of recurrent disease.

Professional Skills And Attitudes
Ability to take history and investigate appropriately.
Ability to recognise histological patterns of disease.
Ability to interpret preoperative investigations and liaise with anaesthetic department.
Ability to counsel patients regarding treatment options and histology.
Ability to select and perform appropriate surgical management of endometrial cancer according to patient’s needs.
Ability to undertake:
- Total abdominal hysterectomy and bilateral salpingo-oophorectomy
- Pelvic node dissection/sampling
- Para-aortic node biopsy
- Laparoscopy-assisted vaginal hysterectomy.
Ability to manage postoperative care and complications thereof.
Ability to define FIGO stage of tumour.
Ability to decide need for adjuvant therapy.
Ability to follow up patients appropriately.
Training Support

- Direct supervision from senior colleagues.
- Attendance at multidisciplinary team and pathology department.
- Attendance at multidisciplinary team with radiologist.
- Ward attendance.
- Supervision in operating theatre.
- Intensive care and high-dependency unit ward rounds.
- Multidisciplinary team attendance.
- Clinical oncology module.
- Joint clinic attendance.

Evidence

- Logbook
- Mini CEX
- OSATS
- Multidisciplinary team attendance
- Laparoscopic skills course
- Audit of complications
Module 6 Cancer of the Cervix

Objectives
To understand and demonstrate appropriate skills and attitudes in relation to managing a patient with a diagnosis of cancer of the cervix.
- Diagnose, investigate and manage a patient with cancer of the cervix.
- Perform appropriate surgery for cervical cancer and manage treatment complications.

Knowledge Criteria
Detailed knowledge of the anatomy of the female pelvis, including blood supply, nervous system and lymphatic drainage of the region.
Knowledge of the course of the ureter throughout the pelvis.
Understanding of the epidemiology and aetiology of cervical cancer.
Understanding of the pathophysiology of cervical intraepithelial neoplasm (CIN).
Understanding of the role of human papillomavirus (HVP) in the aetiology and development of CIN and cervical cancer.
Knowledge of the presentation and diagnosis of cervical cancer.
Pathology of cervical cancer.
Understanding of staging of cervical cancer.
Knowledge of the management of all stages of cervical cancer including surgery and chemoradiation.
In-depth knowledge of radiotherapy principles of treatment and appropriate application to cervical cancer.
Knowledge of appropriate chemotherapy for cervical cancer.
Knowledge of complications and adverse effects of treatment of cervical cancer, both short- and long-term.
Knowledge of pattern of disease recurrence and appropriate management.
Knowledge of the physical and psychosexual morbidity of cancer diagnosis and treatment.

Clinical Competency
Take an appropriate history.
Perform a clinical examination.
Perform colposcopy.
Perform cervical biopsy including punch biopsy, large-loop excision of the transformation zone (LLETZ), ablation therapy in appropriate cases.
Perform clinical staging for invasive cervical cancer.
Perform total hysterectomy (both abdominal and vaginal).
Perform radical hysterectomy.
Perform pelvic lymphadenectomy.
Perform Ppara-aortic lymph node biopsy.
Counsel patients about the diagnosis, investigations and appropriate treatments for cervical cancer, including adverse effects and complications of treatment.
Communicate to patients’ results of investigations and treatment, including prognosis and palliative care.
Interpret results of radiological investigations appropriate to cervical cancer.
Assist in delivery of brachytherapy.
Assist in delivery of chemoradiation therapy.
Manage adverse effects and recognise complications of treatment.
Diagnose, investigate and manage recurrent cervical cancer.
Select patients for exenterative surgery.
Detect and manage physical and psychosexual morbidity (e.g. referral to lymphoedema specialist nurse, psychotherapist or counsellor).
**Professional Skills And Attitudes**

- Ability to take history and examination.
- Ability to perform colposcopy.
- Ability to perform cervical biopsy and LLETZ.
- Ability to perform clinical staging, including cystoscopy with biopsy.
- Ability to perform hysterectomy.
- Ability to perform radical hysterectomy.
- Ability to perform pelvic lymph node dissection (open and laparoscopically).
- Ability to perform para-aortic lymph node dissection (open and laparoscopically).
- Ability to insert brachytherapy applicators.
- Ability to assist with external beam radiotherapy and chemotherapy.

**Training Support**

- Observation of assisting and discussion with senior staff.
- British Society for Colposcopy and Cervical Pathology (BSCCP) certification (including treatment module).
- Direct and indirect surgical supervision of surgical skills to appropriate competency by surgical staff.
- Specific task training and supervision.
- Appropriate postgraduate course.
- Appropriate modules of training:
  - Radiology
  - Radiotherapy
  - Chemotherapy
  - Urology
  - Palliative care
  - Tailored clinical experience.
- Logbook of cases with competency level to which each procedure performed.

**Evidence**

- Logbook
- OSATS
- Mini-CEX
- Case-based discussions
- BSCCP accreditation certificate
- Audit project
- Multidisciplinary team attendance
- Personal audit of complications
- Completion of Radiotherapy module
Module 7 Cancer of the Vulva

Objectives
To diagnose, investigate and manage a patient with cancer of the vulva.
- Competently perform appropriate surgery in a patient with vulva cancer.
- Manage complications of treatment.

Knowledge Criteria
Anatomy of the vulva, femoral triangle, vaginal region and lower abdominal wall, including blood supply, nerve distribution and lymph drainage of the region.

Epidemiology and aetiology of vulval cancer.

Histopathology of vulval cancer.

Pattern of spread of vulval cancer.

Staging of vulval cancer.

Diagnosis and investigations for vulval cancer.

Principles of treatment of all stages of vulval cancer.

Complications of treatment and appropriate management of all stages of vulval cancer.

Pattern of recurrence of vulval cancer.

Recognition and management of recurrent cancer of the vulva.

Long-term complications of treatment of vulval cancer:
- Lymphocysts
- Lymphoedema
- Neuralgia.

Knowledge of the psychosexual morbidity of cancer diagnosis and treatment.

Clinical Competency
Take an appropriate history.

Perform a simple rotation flap to achieve primary closure of vulval wound.

Perform appropriate clinical investigations.

Perform a biopsy of vulva.

Perform vulvoscopy.

Perform a wide local excision of vulva.

Perform a simple vulvectomy.

Perform a radical vulvectomy.

Perform a subfascial groin node dissection.

Developments in the surgical treatment of vulval cancer, including sentinel node detection.

Liaise with plastic surgeon to select and manage patients requiring major skin flaps to close vulval wounds.

Perioperative management of vulval cancer patients.

Manage recurrence of vulval cancer.

Long-term management of vulval cancer patients.

Detect and manage physical and psychosexual morbidity (e.g. referral to lymphoedema specialist nurse, psychotherapist or counsellor).

Professional Skills And Attitudes
Ability to take history.

Ability to perform appropriate examination.

Ability to investigate and counsel patients regarding treatments.

Ability to select and perform competently diagnostic and therapeutic surgery for vulval cancer.

Ability to perform sentinel node detection.

Ability to perform simple skin flaps.

Ability to perform major skin flaps with plastic surgeon.

Ability to manage patient’s postoperative care.

Ability to manage complications of treatment.

Ability to perform (with the assistance of surgical colleagues if necessary):
- Exenterative surgery
- Urinary diversion procedures
- Ileostomy/colostomy.

Ability to organise anterior, posterior and total exenteration, including leading the surgical procedure.
Training Support

- Observation of assisting and discussion with senior medical staff.
- Task-specific job training.
- Personal study.
- Appropriate postgraduate course.
- Tailored clinical experience.
- Supervised surgical training to appropriate competency level by senior staff.
- Attendance at plastic surgery lists (minimum 5 weeks).
- Multidisciplinary team attendance.
- Attendance at lymphoedema specialist clinic.

Evidence

- Logbook of competences and experience
- OSATS
- Mini-CEX
- Case-based discussions
- Surgical logbook
Module 8 Vaginal Cancer

Objectives
To understand and demonstrate appropriate skills and attitudes in relation to managing a patient with a diagnosis of vaginal cancer.
- Undertake primary surgical management.
- Understand management options to address co-morbidity.
- Manage recurrent disease.

Knowledge Criteria
Anatomy of the vagina.

Aetiology of vaginal cancer, including sarcoma botryoides and metastatic lesions.

Benign conditions.

Pathophysiology of vaginal intraepithelial neoplasia.

Multifocal lower genital tract malignancy.

Clinical presentation, investigation and FIGO staging.

Detailed management of vaginal cancer.

Physical and psychosexual morbidity of cancer diagnosis and treatment.

Clinical Competency
Take a history and perform an appropriate examination.

Perform vaginoscopy and vaginal biopsy.

Arrange staging and imaging investigations.

Arrange and aid delivery of radio or chemotherapy.

Counsel and take consent from patient.

Perform partial vaginectomy.

Perform radical vaginectomy.

Detect and manage physical and psychosexual morbidity (e.g. referral to lymphoedema specialist nurse, psychotherapist or counsellor).

Professional Skills And Attitudes
Ability to perform vaginal biopsy.

Ability to perform partial vaginectomy:
- Abdominal approach
- Vaginal approach.

Ability to perform radical excision of vagina (exenterative surgery; see modules 3, 6 and 7).

Training Support
- Observation and discussion with senior staff.
- Senior supervision.
- British Society for Colposcopy and Cervical Pathology (BSCCP) training and course.
- Multidisciplinary team meeting.
- Radiotherapy/clinical oncology module.
- Direct observation by senior staff.

Evidence
- Logbook of competences and experience
- Mini-CEX
- Case-based discussions
- Accreditation with BSCCP
- Multidisciplinary team attendances
- Surgical logbook
Module 9 Medical Oncology

Objectives
To understand the role of chemotherapy in the management of gynaecological cancers.

To understand the pharmacology of the major drugs used in chemotherapy.

To understand the role and latest trial results of chemotherapy in gynaecological tumours.

Knowledge Criteria
Relevant cell biology including:
- Cell-cycle kinetics
- Log kill hypothesis
- Cycle and phase specificity.

Classes of chemotherapeutic agents and their mechanisms of action.

Pharmacology of the main agents used in gynaecological cancers.

Principles of dose calculation and scheduling.

Understand the benefits and limitations of single-agent and combination chemotherapy.

Guidelines and definitions for evaluation of response.

Principles of phase I, II, and III clinical trials.

Conversation with seminal chemotherapeutic trials in gynaecological cancers.

Understand the concept of adjuvant and neoadjuvant therapy.

Short- and long-term toxicity, both general and drug-specific.

Chemotherapeutic management of gestational trophoblastic disease.

The role of hormonal and other agents.

Therapeutic options for recurrent disease.

Clinical Competency
Take an appropriate history.

Perform a clinical examination.

Knowing the indications for chemotherapy.

Assessment of response to chemotherapy.

Counsel patients about the basics of chemotherapy, including adverse effects and complications of treatment.

Knowing the limitations of chemotherapy and when to change or stop treatment.

Recognition, assessment and management of acute and chronic toxicity.

Professional Skills And Attitudes
Ability to discuss management at multidisciplinary team meeting, including most appropriate chemotherapy regimen, according to patient’s disease and medical status.

Ability to counsel patients about the basics of chemotherapy, including adverse effects and complications of treatment.

Ability to liaise with colleagues and other health professionals regarding coordinating investigations and management strategies pertinent to individual patients.

Ability to recognise, investigate and management of toxicity.

Ability to counsel patients about clinical trials.

Training Support
- Observation of assisting and discussion with senior staff.
- Specific task training and supervision.
- Postgraduate courses.
- Good clinical practice course.
- Gestational trophoblastic disease course.

Evidence
- Logbook of competences and experience
- Mini-CEX
- Case-based discussions
Module 10 Clinical Oncology

Objectives
To have sufficient familiarity with principles and practice to inform patients appropriately and recognise complications.

Knowledge Criteria
Cell-cycle kinetics.
Radiation effects.
Recovery and repair of tissues.
Potentiation of effects.
Protection.
Sensitivity of different organs.
Different types of radiation.
Inverse square law.
Time–dose relationships.
Half-life isotopes.
Ionisation and modifying factors.
Radiation units.
Isodose curves.
Principles of fractionation.
Orthovoltage and supravoltage.
CT planning and dosimetry.
Types of fields.
Types of sources and methods.
Use of chemotherapy as an adjuvant complications in:
- Gastrointestinal tract
- Urinary tract
- Skin
- Bone marrow
- Kidney
- Ureter
- Central nervous system
- Genital tract.

Clinical Competency
Understand principles of radiotherapy.
Understand how radiotherapy affects organs and radiosensitivity of different cancers.
Select patients for radiotherapy according to disease, tumour type and stage.
Understand how to plan patients for radiotherapy.
Counsel patient on how radiotherapy works, how it will affect them and what complications may occur.
Understand the difference between curative and palliative treatment.
Management of long-term effects of radiotherapy:
- Vaginal stenosis
- Ovarian failure
- Oedema
- Osteopenia
- Fistula.
Recognition, investigations and management of recurrent gynaecological cancer following primary radiotherapy and chemoradiation.

Professional Skills And Attitudes
Ability to select patients for radiotherapy.
Ability to counsel patients regarding radiotherapy treatment.
Ability to plan radiotherapy treatment.
Ability to counsel patients regarding complications.
Ability to recognise and manage adverse effects of radiotherapy:
- Skin
- Urinary tract
- Gastrointestinal tract
- Vagina:
  - dryness
  - hormone replacement therapy
  - dilators
- Psychosexual.
Ability to recognise and manage major complications of radiotherapy in liaison with other colleagues:
fistula
vaginal stenosis
oedema
osteopenia.
Ability to recognise and investigate tumour recurrence.
Training Support

- Multidisciplinary team meeting attendance.
- Combined oncology clinics.
- Radiotherapy planning clinics.
- Clinical oncology operating theatre sessions.
- Attendance with psychosexual counsellors and clinical nurse specialists.

Evidence

- Logbook of competences and experience
- Mini-CEX
- Case-based discussions
- Multidisciplinary team attendance
Module 11 Radiology

Objectives
To understand the role of imaging in gynaecological cancer.
- Principles of different imaging modalities.

Knowledge Criteria
Main imaging modalities in gynaecological oncology:
- Physics
- Indications
- Limitations.

Nuclear medicine.

Intervention radiology:
- Guided biopsies
- Stenting
- Caval filters
- Embolisation.

Sentinel node assessment.

Clinical Competency
Assessment and interpretation with relevance to clinical scenario:
- Standard plain ultrasound
- Cross-sectional imaging
- Nuclear.

Ability to recognise the indications for interventional radiology.

Professional Skills And Attitudes
Discussion of images with relevance to clinical scenario with radiologist/trainers.

Training Support
- Attendance at multidisciplinary team meetings.
- Attendance at radiology department for relevant procedures.

Evidence
- Logbook of competences and experience
- Mini-CEX
- Case-based discussions
Module 12 Palliative Care

Objectives
To understand the concept and delivery of care to patients with terminal gynaecological malignant disease.
- Decision for palliative care.
- Holistic approach to the symptoms and anxieties of the patient and their relatives.

Knowledge Criteria
Role of palliative care team in gynaecological malignancy:
- How to break bad news to a patient
- Symptoms associated with terminal malignancy
- Causes of and patterns of pain
- Therapies for pain relief and how they work
- Choice of appropriate analgesic
- Pain services available
- Pathophysiology of nausea and vomiting
- Therapies for treatment of nausea and vomiting
- Anxiety and depression
- Counselling for patient and family
- Pathophysiology of oedema
- Therapies for relief of oedema
- Palliative care team in hospital, hospice and community.

Community support roles of:
- General practitioner
- District nurse
- Cancer specialist nurse
- Family
- Religion
- Cancer support groups
- Social services.

Role of palliative care in multidisciplinary team function.

Clinical Competency
Effective and sympathetic communication skills.

Recognise when a patient should have palliative care input into management.

Recognise and appropriately manage symptoms in a palliative care setting.

Recognise anxiety and depression and psychosexual problems and involve appropriate teams in management.

Work within a palliative care team in hospital, hospice and community.

Professional Skills And Attitudes
Ability to communicate with patients and give information about disease process, including bad news.

Ability to appropriately involve members of palliative care team in patient management.

Ability to manage patients’ symptoms in liaison with palliative care team.

Ability to work as part of a palliative care team in hospital, hospice and community.

Ability to involve palliative care team in multidisciplinary team framework.

Training Support
- ‘Breaking bad news’ course.
- Working in supervised environment with senior team.
- Communicating with patients and managing their care on a day-to-day basis.
- Attend pain clinic (five sessions).
- Palliative care module (3 weeks).
- Working within multidisciplinary team.
- Attendance with specialist oedema physiotherapist.

Evidence
- Logbook of competences and experience
- Mini-CEX
- Case-based discussions
- Multidisciplinary team attendance.
Module 13 Urology

Objectives
To have an understanding of the impact of gynaecological cancer and its treatment on the renal tract.
- Aware of possible urological complications.
- Identify and manage urological complications.

Knowledge Criteria
Anatomy and physiology of kidney, ureter, bladder and urethra.
Effects of gynaecological malignancy upon urinary tract.
Effects of treatment for gynaecological malignancy on urinary tract; e.g. radical surgery, radiotherapy.
Communication with patients and family about the effects of gynaecological malignancy and treatments on urinary system; e.g. fistula, obstruction, bladder disorders.
Interpret investigations ordered.
Recognition and management of injury to urinary tract.
Principles of repair of injury to:
- Ureter
- Bladder
- Urethra.
Selection of patients who would benefit from intervention surgery involving the urinary tract; e.g. Urethral stenting, fistula repair, exenterative surgery.
Pre- and postoperative care of patients undergoing urology procedure.

Clinical Competency
Ability to appropriately investigate and diagnose disorders of the urinary tract in a gynaecological cancer setting.
Appropriate ordering of investigation and liaison with urology team.
Investigation of diseases of urinary tract:
- Urine (microscopy, culture and sensitivity; biochemistry)
- Haematology
- Ultrasound
- X-ray
- Magnetic resonance imaging
- Cystoscopy
- Ureteroscopy.

Knowledge of damage to ureter and bladder due to disease process or surgery; e.g. fistula, obstruction, surgical injury.
Perform:
- Cystoscopy
- Repair to bladder
- Dissection of ureter.

Professional Skills And Attitudes
Effectively manage patients with suspected disorders of urinary tract.
Order and interpret investigations of urinary tract.
Appropriate selection of patients for intervention surgery involving the urinary tract.
Insert suprapubic catheter.
Perform cystoscopy.
Perform surgical repair of bladder injury.
Perform (with the assistance of urology colleague if necessary):
- Ureteroscopy
- Insertion of ureteric stent
- Repair of ureter
- Ureteric reimplantation
- Primary anastomosis of ureter
- Cystectomy
- Ileal conduit
- Continent urinary diversion.

Training Support
- Working under senior supervision.
- Joint clinics.
- Radiotherapy module.
- Attendance at urodynamic clinic.
- Multidisciplinary team.
- Attendance to radiology department.
- Urology module (minimum 10 sessions).
- Gynaecological multidisciplinary team and urology multidisciplinary team.

Evidence
- Logbook.
- Mini-CEX
- Case-based discussions
Module 14 Colorectal Surgery

Objectives
To understand the role of fluid balance and nutrition in the surgical patient.

To understand the indications and principles of bowel resection and repair in the context of gynaecological oncology.
- Accidental bowel injury.
- Elective bowel resection.

Knowledge Criteria
Anatomy and physiology of gastrointestinal tract.
Pathophysiology of intestinal function.
Care of critically ill patient.
Principles of surgery of gastrointestinal tract, including exposure handling and injury to tissues.

Principles of resection and repair of intestinal tissues:
- Primary repair
- Secondary repair
- Ileostomy
- Colostomy.

Indications to perform bowel surgery in a gynaecological oncology setting.

Use of radiology in investigation and management of gastrointestinal tract disorders.

Appropriate selection of patients who will benefit from bowel surgery.

Preoperative preparation required for a patient who may or will have bowel surgery.

Clinical Competency
Perform rigid sigmoidoscopy.

Counsel patients preoperatively and postoperatively regarding bowel surgery and stoma management, including benefits, risks and complications.

Perform laparotomy and identify abnormalities throughout abdominal cavity, including liver, spleen, omentum, appendix, peritoneum, pancreas and large and small bowel.

Oversew serosal injury to bowel.

Repair mucosal injury to small bowel.

Select area to be resected and perform primary anastomosis of small bowel.

Select area and perform ileostomy.

Perform appendicectomy.
Select appropriate tissue and resect large bowel with formation of colostomy.
Mark stoma site appropriately.
Order and interpret appropriate investigations preoperatively.
Order appropriate bowel preparation preoperatively.
Select patients preoperatively and intraoperatively who will benefit from bowel surgery.
Manage postoperative care of patients following bowel surgery.

Professional Skills And Attitudes
Ability to perform sigmoidoscopy.

Ability to counsel patient regarding bowel surgery and stoma management, including preoperatively.

Ability to perform exploratory abdominal procedure.

Ability to perform bowel surgery:
- Oversew serosa
- Repair small bowel injury
- Resect and reanastomose small bowel
- Appendicectomy.

Ability to perform bowel surgery (with the assistance of surgical colleagues if necessary):
- Ileostomy
- Colostomy
- Resection of large bowel
- Primary anastomosis of large bowel
- Abdominal perineal resection.

Ability to select and mark stoma site.

Training Support
- Colorectal outpatient clinic.
- Attend intensive care unit ward rounds.
- Attend dietician ward rounds.
- Observation and assisting senior staff.
- Senior staff supervision.
- Colorectal attachment (4 weeks).
- Surgical anastomosis course.
- Attendance with soma therapist.

Evidence
- Logbook.
- Mini-CEX
- Case-based discussions
Module 15 Plastic Surgery and Wound Care

Objectives
Understand the principles of plastic surgery and its indication in the management of gynaecological malignancy.
- Surgical procedures.
- Management of wound complications.

Knowledge Criteria
Physiology of wound healing and factors influencing healing.
Surgical site infection.
Recognise and manage wound dehiscence.
Management of incisional hernia.
Anatomy of vulva, perineum and groin.
Techniques of vulval repair and reconstruction.
Vaginal reconstruction.
Breast cancer.

Clinical Competency
Management of surgical site infections.
Management of recognised wound dehiscence.
Management and performance of appropriate repair.
Repair of incisional hernia, including use of mesh.
Selection of patients for appropriate surgical intention using:
- Split-thickness skin graft
- Rotational flaps
- Advancement grafts
- Myocutaneous flaps.
Williams procedure.
Split-thickness skin graft.
Myocutaneous graft.

Professional Skills And Attitudes
Ability to close wound, including choice of suture material.
Ability to diagnose and select antibiotics and identify need for incision and drainage.
Ability to repair wound dehiscence.
Ability to repair incisional hernia:
- Without mesh
- With mesh.

Training Support
- Direct observation by senior staff.
- Attendance with tissue viability team.
- Colorectal module.
- Plastic surgery attachment.

Evidence
- Logbook of competences and experience
- Mini-CEX
- Case-based discussions
Module 16 Gestational Trophoblastic Disease

Objectives
To diagnose, investigate and manage a patient with gestational trophoblastic disease.

Knowledge Criteria
Definition and classification of gestational trophoblastic disease.
Epidemiology and aetiology of gestational trophoblastic disease.
Histopathology of gestational trophoblastic disease.
Clinical features and behaviour of different entities of gestational trophoblastic diseases.
Principles of management of different entities of gestational trophoblastic diseases.
Principles and pitfalls in the measurement of human chorionic gonadotrophin.
Diagnosis and staging of gestational trophoblastic neoplasia.
Histopathological features of gestational disease.
Complications of treatment and management of gestational trophoblastic disease and neoplasia.
Management of chemoresistant and relapsed gestational trophoblastic neoplasia.
Role of surgery and radiotherapy in the management of gestational trophoblastic neoplasia.
Genetic and molecular markers and their potential clinical applications.

Clinical Competency
Take an appropriate history.
Perform appropriate clinical examination and investigations.
Perform suction evacuation for molar pregnancy.
Perioperative management of patients undergoing suction evacuation for molar pregnancy.
Appropriate follow-up of patients following a molar pregnancy.
Decide need for and perform hysterectomy in emergency situations.
Diagnose and stage gestational trophoblastic neoplasia.

Follow-up patients following treatment for gestational trophoblastic neoplasia.

Professional Skills And Attitudes
Ability to take history and perform appropriate physical examination.
Ability to counsel patients about a diagnosis of molar pregnancy and its subsequent management.
Ability to perform suction evacuation, including preoperative, intraoperative and postoperative management.
Ability to counsel patients on contraception and pregnancy outcome following molar pregnancy.
Ability to counsel patients about a diagnosis of gestational trophoblastic neoplasia.
Ability to carry out appropriate investigations for staging of gestational trophoblastic neoplasia and to classify patients into low- or high-risk groups.
Ability to counsel patients on the possible adverse effects of treatment.
Ability to manage complications of treatment.
Ability to register patients at supraregional centre for follow up.

Training Support
- Attend at the national one-day meeting.
- Discussion with senior medical staff.
- Personal study.
- Attachment to medical oncology unit – part of the modular training.
- Review histology with pathologist.
- Attendance at multidisciplinary team.

Evidence
- Mini-CEX
- Case-based discussion
- Logbook
Module 17 Genetic Predisposition to Gynaecological Cancer

Objectives
To diagnose, investigate and manage a patient with a genetic predisposition to gynaecological cancer.
- Management of patients with a family history suggesting genetic predisposition to gynaecological cancer.
- Understanding of familial ovarian cancer syndromes, BRCA and hereditary nonpolyposis colorectal cancer.
- Concepts of cancer screening.
- Issues surrounding prophylactic surgery.

Knowledge Criteria
Background for a patient with a genetic predisposition to gynaecological cancer.
Epidemiology and aetiology of a genetic predisposition to gynaecological cancer.
Molecular biology and histopathology of a genetic predisposition to gynaecological cancer.
Clinical features and behaviour of different genetic predispositions.
Principles of management of different entities for these genetic predispositions.
Principles and pitfalls in the assessment of the molecular biology techniques presently available.
Complexity of counselling and complications of subsequent management of patients with a genetic predisposition to gynaecological cancer.
Role of prophylactic surgery in the management of patients with a genetic predisposition to gynaecological cancer and the specific problems for follow-up in relation to hormonal psychological and reproductive sequelae.

Clinical Competency
Take an appropriate history.
Determine a patient’s pedigree.
Counsel a well patient with a known predisposition to gynaecological cancer.
Perform appropriate clinical examination and investigations.
Perform prophylactic surgery involving laparoscopic techniques as required.
Work with other disciplines to ensure appropriate management.

Liaise with medical genetics department to assess risk of developing cancer.

Professional Skills And Attitudes
Ability to take history and perform appropriate physical examination.
Ability to counsel well patients regarding a diagnosis and subsequent management of patients with a genetic predisposition to gynaecological cancer.
Ability to perform preoperative, intraoperative and postoperative managements as required.
Ability to counsel patients on hormonal and other medication in relation to outcomes after screening or treatment.
Ability to organise appropriate investigations for screening if conservative approach taken.
Ability to recognise the requirement for failsafe for conservative management.
Ability to counsel patients on the possible adverse effects of treatment.
Ability to manage complications of treatment.
Ability to perform prophylactic surgery for gynaecological cancer.

Training Support
- Observation or assisting and discussion with senior medical staff.
- Personal study.
- Attachment to cancer genetics unit.
- Supervised surgical training to appropriate competency level by senior staff.
- Attendance at cancer genetics clinic.

Evidence
- Mini-CEX
- Case-based discussion
- Logbook of competences and experience