



Acute Gynaecology and Early Pregnancy

Introduction

This module is designed to prepare the future consultant to deal with all the problems arising from complications in early pregnancy and acute gynaecological conditions. Although the contents of the module will be a necessary requirement for those lead consultants in this area of practice, trainees with other career aims will find this a useful adjunct to general obstetric and gynaecological practice.

Trainees may have gained sufficient ultrasound skills prior to registering for the module but will be required to demonstrate and produce evidence of these skills during the module. Trainees should therefore complete the Intermediate Ultrasound in Gynaecology module and the Intermediate Ultrasound of early pregnancy complications modules prior to or parallel to undertaking this ATSM.

An understanding of the provision of services, NHS funding and management structure is an important component of this ATSM.

Once trained, the individual should:

- work well as a member of a multidisciplinary team
- be able to set up new multidisciplinary services to encompass the particular needs of different groups of patients
- be clinically competent and confident in all aspects of acute care
- be aware of their own clinical limitations and able to seek help where necessary
- be able to teach the skills necessary for safe practice to trainees in years one to five
- be able to undertake and use clinical audit in this field
- be able to produce evidence based clinical guidelines

The ATSM must be undertaken with an identified educational supervisor who must be in a position to directly supervise and assess competency.

A suitable early pregnancy and emergency gynaecology course is recommended for this ATSM.

Learning outcomes

To develop knowledge and skills to be able to pursue a lead role in the management of women with acute gynaecological and early pregnancy problems

| Knowledge criteria | Clinical competency | Professional skills and attitudes | Training support | Evidence/ Assessment |
|--|---|---|---|---|
| <ul style="list-style-type: none"> Broad knowledge of aetiology and differential diagnosis of acute abdominal pain Understanding of haematological, biochemical, microbiological and radiological investigations Extensive knowledge of options available to treat acutely ill women In depth knowledge of epidemiology, aetiology, clinical features and diagnostic tests in early pregnancy complications Good knowledge of options for managing early pregnancy problems Understanding of management issues in the provision of acute gynaecological care | <ul style="list-style-type: none"> Clinical assessment of women with acute abdominal pain Medical and surgical management of acutely ill patient, including haemorrhagic shock and sepsis Resuscitation skills Ability to use ultrasound for differential diagnosis of pelvic pain and early pregnancy complications Laparoscopic surgery for ectopic pregnancy, ovarian cyst accidents and drainage of pelvic abscess Ultrasound guided invasive procedures Ability to chose between various conservative medical and surgical options in management of early pregnancy complications Ability to develop clinical protocols for management of pregnancies of unknown location Management of recurrent miscarriage | <ul style="list-style-type: none"> Management of a multi-disciplinary team Collaboration with consultant colleagues and colleagues in other specialities and departments Ability to develop and disseminate local protocols for management of acute gynaecological problems Appropriate and rapid clinical decision-making in daily clinical practice Awareness of emotional implications for patient and family and staff Realistic recognition of own competence level Use of appropriate external protocols and guidelines Making appropriate tertiary referrals | <ul style="list-style-type: none"> Attendance at suitable course Additional training in gynaecological ultrasound and laparoscopic surgery ATLS courses ➤ Useful Websites <ul style="list-style-type: none"> -National Institute of Clinical Excellence (NICE) -RCOG -Miscarriage Association website -The Ectopic Pregnancy Trust -Association of Early Pregnancy Units Local protocols | <ul style="list-style-type: none"> Case log book Audit projects Certificates of course attendance OSATS: Operative laparoscopy, ERPS Case based discussions Mini CEX Team observation Evidence of involvement in local protocol development Evidence of involvement with service development discussions Attendance at early pregnancy unit/clinic (>20) |

Appendix to Acute Gynaecology and Early Pregnancy

Details of knowledge criteria

- **Broad knowledge of aetiology and differential diagnosis of acute abdominal pain**

Gynaecological causes of acute pain – ovarian cyst accidents (rupture and torsion), acute pelvic inflammatory disease, degenerating/prolapsing uterine fibroid, ectopic pregnancy.

Non-gynaecological causes of acute pain – acute appendicitis, acute bowel obstruction, diverticular disease, inflammatory bowel disease, perforated ulcer, incarcerated hernias (inguinal, femoral, umbilical and incisional, mesenteric infarction, pelvic vein thrombosis, ruptured aortic aneurism, acute UTI, acute urinary retention, urolithiasis

- **Understanding of haematological, biochemical, microbiological and radiological investigations**

Haematological changes in acute haemorrhage, sepsis and thrombosis

Biochemical findings in acute sepsis and urinary tract obstruction

Dynamics of serum hCG and progesterone in normal and abnormal early pregnancy

Relevant infection screens

Indications for plain abdominal film, chest x-ray, abdominal ultrasound scan, CT and MRI in the investigation of acute pelvic pain

- **Extensive knowledge of options available to treat acutely ill women**

Resuscitation measures

Management of massive blood loss

Effective pain relief

Antimicrobial therapy

Management of acute thromboembolic events

Conservative and surgical management of acute pain

Management of hyperemesis gravidarum

- **In depth knowledge of epidemiology, aetiology, clinical features and diagnostic tests in early pregnancy complications**

Epidemiology of miscarriage

Causes of miscarriage – chromosomal defects, structural uterine anomalies, cervical incompetence, autoimmune causes,

Other factors affecting development of early pregnancy: drugs (prescription and recreational), viral infections, radiation and chemotherapy, immunisation

Transvaginal ultrasound – morphological features of normal early pregnancy development, differential diagnosis between complete, incomplete and missed miscarriage

The use of serum biochemistry for the diagnosis of miscarriage

Risk factors for ectopic pregnancy

Variations in clinical presentation of ectopic pregnancies

Clinical, ultrasound, laparoscopic and histological diagnosis of ectopic pregnancy

Risk factors, clinical presentation, ultrasound and laparoscopic diagnosis of non-tubal ectopics

➤ **Good knowledge of options available for managing early pregnancy problems**

Expectant management of miscarriage – selection criteria, follow up, success rates

Medical treatment with misoprostol and mifepristone – selection criteria, route of administration and dosage, effectiveness, side effects and follow up

Surgical management of miscarriage– selection criteria, outpatient, local anaesthetic and in-patient under general anaesthesia, antibiotic prophylaxis, complications, effectiveness, follow up

Expectant management of tubal ectopics – selection criteria, success rates, follow up

Medical treatment with methotrexate – selection criteria, dosage, side effects, effectiveness, follow up

Laparoscopy and laparotomy for ectopics – choice of appropriate route for surgery

Salpingectomy vs salpingotomy – selection criteria, complications, follow up

Fertility after ectopic pregnancy and future follow up

Management of non-tubal ectopics – conservative vs surgical, risks, complications, follow up, future fertility

• **Understanding of management issues in the provision of acute gynaecological care**

Environment

Staffing

Facilities and equipment

Referral patterns and triage

External support

Training

Clinical protocols,

Risk management

Audit and research

| Skill | Competence level | | | | | |
|---|------------------|-----------|---------|-----------|---------|-----------|
| | Level 1 | | Level 2 | | Level 3 | |
| | Date | Signature | Date | Signature | Date | Signature |
| Diagnosis of acute abdomen | | | | | | |
| Management of haemorrhagic and septic shock | | | | | | |
| Ultrasound diagnosis of fibroids, ovarian tumours, pelvic abscess, acute appendicitis and acute urinary retention | | | | | | |
| Management of severe vaginal bleeding | | | | | | |
| Laparoscopic ovarian cystectomy, adhesiolysis | | | | | | |
| Management of acute pelvic infection | | | | | | |
| Surgical drainage of pelvic abscess (transabdominal and transvaginal) | | | | | | |
| Correlation of ultrasound and biochemical measurements in normal early pregnancy | | | | | | |
| Diagnosis of multiple pregnancy and assessment of chorionicity | | | | | | |
| Ultrasound diagnosis of miscarriage and tubal ectopic pregnancy | | | | | | |
| Management of pregnancies of unknown location | | | | | | |
| Diagnosis of non-tubal ectopic pregnancy | | | | | | |
| Medical management of miscarriage with misoprostol and mifepristone | | | | | | |

| Skill | Competence level | | | | | |
|---|------------------|-----------|---------|-----------|---------|-----------|
| | Level 1 | | Level 2 | | Level 3 | |
| | Date | Signature | Date | Signature | Date | Signature |
| Conservative and surgical management of non-tubal ectopics | | | | | | |
| Diagnosis and management of heterotopic pregnancies | | | | | | |
| Diagnosis and management of pelvic tumours in early pregnancy | | | | | | |
| Ultrasound assessment of uterine cavity and cervix in women with recurrent miscarriages | | | | | | |
| Diagnosis and management antiphospholipid syndrome | | | | | | |
| Diagnosis and initial management of trophoblastic disease | | | | | | |

| Training courses or sessions | | |
|------------------------------|-------------------------------------|------|
| Title | Signature of Educational Supervisor | Date |
| | | |
| | | |