SUBFERTILITY

Module 14: Subfertility

Learning outcomes:

■ To understand the issues and demonstrate appropriate knowledge, skills and attitudes in relation to subfertility.

| Knowledge criteria | Clinical competency | Professional skills and attitudes | Training support | Evidence/assessment |
|---|--|--|---|---|
| Epidemiology, aetiology, pathogenesis, clinical features, treatment and prognosis of male and female subfertility Indications, limitations and interpretation of investigations: endocrine measurements (male and female) semen analysis ultrasound other imaging techniques genetic analysis operative procedures Indications, techniques, limitations and complications of surgery in relation to: male and female subfertility endometriosis developmental disorders Indications, limitations and complications of assisted reproduction techniques: ovulation induction IVF and ICSI gamete donation Legal and ethical issues | Take history and examine a couple presenting with subfertility Arrange basic investigations Counsel couples about diagnosis and management options Perform the following: diagnostic laparoscopy staging of endometriosis assessment of tubal patency diagnostic hysteroscopy | Shows an appreciation of the importance of psychological factors for women and their partners Demonstrates respect for woman's dignity and confidentiality Has an understanding of the issues relating to NHS funding and rationing of treatment Demonstrates the ability to deal sensitively with issues relating to the welfare of the child Has the ability to acknowledge cultural issues and issues relating to same sex partnerships and single parenthood Demonstrates the need to liaise effectively with colleagues in other disciplines, clinical and nonclinical | Appropriate postgraduate education courses Multidisciplinary and clinical team meetings StratOG.net: Subfertility e-tutorials Subfertility clinics Assisted reproduction sessions Useful websites: www.nice.org.uk www.hfea.gov.uk | Logbook SOE EXIT EXAMINATION MRCOG Part 2 Case reports Audit projects OSATS: Diagnostic laparoscopy |

Appendix to Curriculum Module 14: details of knowledge criteria

Epidemiology, aetiology, pathogenesis, clinical features, treatment and prognosis of male and female subfertility:

- Female (ovulatory disorders, tubal disorders, endometriosis, cervical and uterine factors, genetic and developmental disorders).
- Male (structural, endocrine, pharmacological, infectious, lifestyle, genetic).
- Unexplained infertility.
- Long-term sequelae of cancer treatment.
- Sterilisation regret.

Indications, limitations and interpretation of investigative techniques:

- Semen analysis.
- Endocrine assessment (see also Module 13):
 - assessment of ovulation
 - assessment of the subfertile male
 - amenorrhoea and oligomenorrhoea
 - polycystic ovary syndrome
 - hyperprolacinaemia
 - thyroid/adrenal function
 - gonadal failure.
- Genetic analysis:
 - chromosome analysis, e.g. sex chromosome abnormalities
 - Genetic abnormities, e.g. cystic fibrosis.

Ultrasound:

- Normal uterine and ovarian morphology.
- Follicular tracking
- Polycystic ovaries.
- Tubal patency.

Other imaging techniques:

- Hysterosalpingography.
- Pituitary imaging.
- Computed tomography.
- Magnetic resonance imaging.

Operative investigative procedures:

- Diagnostic laparoscopy.
- Diagnostic hysteroscopy.

Indications, limitations, techniques and complications of:

- Ovulation induction (clomifene, gonadotrophins, gonadotrophin-releasing hormone).
- Other medical interventions (e.g. metformin, dopaminergic drugs).
- Intrauterine insemination.
- In vitro fertilisation.
- intracytoplasmic sperm injection.
- Surgical sperm recovery.

Legal and ethical issues:

- Human Fertilisation and Embryology Act.
- Welfare of the child.
- Embryo storage.
- Gamete donation.
- Surrogacy.

Indications, limitations and complications of surgery in relation to male and female infertility:

- Reversal of sterilisation and vasectomy.
- Adhesiolysis.
- Salpingostomy.
- Surgical management of endometriosis.
- Ovarian diathermy.
- Myomectomy.
- Hysteroscopic surgery.
- Varicocoele.

Module 14: Subfertility

Fill in as a record of experience.

| Skills | Compet | ence level | Basic training | Intermediate training | Advanced | d Not required |
|----------------------------------|-------------|----------------------|-------------------|-----------------------|----------|----------------------|
| | Observation | | Direct s | upervision | Indepen | dent practice |
| | Date | Signature of trainer | Date | Signature of trainer | Date | Signature of trainer |
| Take history from couple | | | | | | |
| Investigate female subfertility | | | | | | |
| Interpret semen analysis | | | | | | |
| Manage anovulation | | | | | | |
| Investigate tubal function | | | | | | |
| Counsel about management options | | | | | | |

| Authorisatio | n of signatures (to b | e completed by th | e clinical train | ners) | | | |
|------------------|-------------------------------------|---|------------------|---------------------|-----------------------------------|------|--|
| Name of clinical | trainer (please print) | | | Signature of clinic | cal trainer | | |
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| | | | | | | | |
| OSAT | Record all formal Record date of sa | assessments until train tisfactory assessment. | ee passess. | | | | |
| Diagnostic | Date | Date | | Date | Date | Date | |
| laparoscopy | Signature | Signature Signature Signature Signature Signature | | | | | |
| | | | | | | | |
| COMPLETIC | N OF MODULE 14 | | | | | | |
| I confirm tha | at all components of | the module have b | een successfi | ally complete | d: | | |
| Date | Name of educational | supervisor | | Si | gnature of educational supervisor | | |
| | | | | | | | |
| | | | | | | | |

DIAGNOSTIC LAPAROSCOPY

| Clinical details of complexity/difficulty of case | Assessor Name: | Trainee Name: |
|---|----------------|---------------|
| of complexity/ e | | |
| | | |
| | Post: | StR Year: |
| | | Date: |
| | | |

| | Performed independently | Needs help | Not Applicable |
|--|--------------------------|---------------|-------------------|
| | PLEASE TICK RELEVANT BOX | RELEVAN | Т ВОХ |
| Preparation of the patient: | | | |
| Ensures correct positioning of the patient | | | |
| Checked or observed catheterisation, pelvic examination and insertion of uterine manipulator where appropriate | | | |
| Establishing pneumoperitoneum | | | |
| Demonstrates knowledge of instruments and can trouble shoot problems | | | |
| Check patency and function of Veress (if used) | | | |
| Correct incision | | | |
| Controlled insertion of Veress (if used) | | | |
| Insufflation to at least 20 mmHg | | | |
| Controlled insertion of primary port | | | |
| Controlled insertion of secondary port under direct vision | | | |
| Operative procedure | | | |
| Maintains correct position of optics | | | |
| Clear inspection of pelvic and abdominal structures | | | |
| Movements: fluid and atraumatic | | | |
| Appropriate use of assistants (if applicable) | | | |
| Correct interpretation of operative findings | | | |
| Removal of ports under direct vision | | | |
| Deflation of pneumoperitoneum | | | |
| Appropriate skin closure | | | |

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:

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

Based on the checklist and the Generic Technical Skills Assessment, $\ensuremath{\mathrm{Dr}}$. to achieve the OSAT competency

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