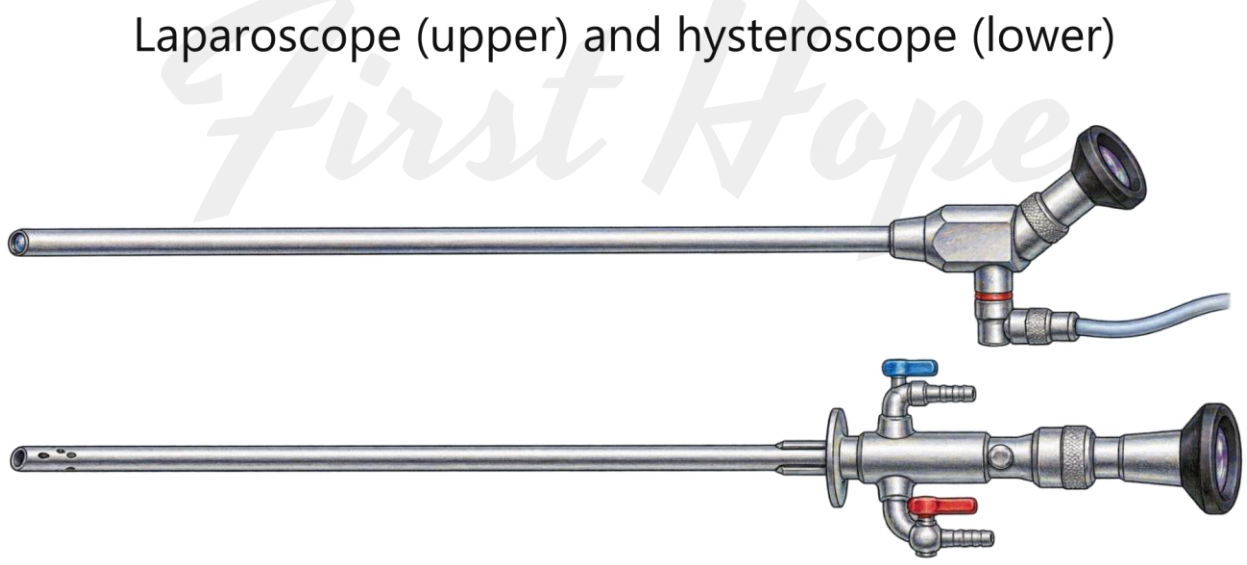
Obstetrics & Gynaecology - Topic 38 - Observed Endoscopic Procedures and Medical Certification

Observing Endoscopic Gynaecological Procedures

Prepare for Meaningful Observation

- Before observing a procedure, identify the symptom or diagnosis, the purpose of the operation and the available alternatives.
- Read the consent and understand the planned extent of surgery, anaesthesia and possible additional procedures.
- Ask permission for student involvement and maintain confidentiality throughout the encounter.
- Observe safety checks, sterile technique, team communication and postoperative handover as well as the operation itself.
- Record learning points without including unnecessary patient identifiers in a personal logbook.

Laparoscopy and Hysteroscopy Are Different



Laparoscopy and hysteroscopy use optical instruments suited to different routes and anatomical spaces

Feature	Laparoscopy	Hysteroscopy
Route	It uses abdominal access.	It passes through the cervix.
Main view	It shows abdominal and pelvic organs.	It shows the uterine cavity.
Operating space	Carbon dioxide commonly creates space.	A compatible distension medium opens the cavity.

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Feature	Laparoscopy	Hysteroscopy
Examples	It can treat selected adnexal disease or perform sterilisation.	It can assess or remove selected cavity lesions.
Key risks	Entry, vascular, bowel and thermal injuries require attention.	Perforation, fluid overload and pain require attention.

Laparoscopy

Principle, Uses and Preparation

Understand the Method

- Laparoscopy uses a telescope and camera through a small abdominal access site to view the abdominal and pelvic organs.
- Additional ports allow instruments to retract, grasp, cut, seal or suture tissue under vision.
- Carbon dioxide commonly creates a pneumoperitoneum, which provides operating space between the abdominal wall and organs.
- Positioning may move bowel away from the pelvis, but it also affects ventilation, circulation and pressure areas.

Recognise Common Indications

- Laparoscopy may assess selected pelvic pain, suspected endometriosis, adnexal disease or infertility-related anatomy.
- Operative uses include treatment of ectopic pregnancy, ovarian cyst surgery, adhesiolysis, hysterectomy and sterilisation.
- The need for surgery depends on the clinical problem, and laparoscopy is not mandatory for every patient with suspected endometriosis.
- Severe instability, major cardiopulmonary limitation, extensive disease or difficult access may require another approach or specialist planning.

Observe Preparation

- Confirm the indication, consent, pregnancy status, relevant imaging, anaesthetic fitness and risk of bleeding or adhesions.
- Previous abdominal surgery may change entry planning because bowel or vessels can lie close to the access site.
- Check the camera, light source, insufflator, electrosurgical equipment, suction and availability of instruments for conversion to open surgery.
- Position the patient carefully, protect pressure areas and use a plan for bladder drainage and thrombosis prevention when indicated.

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Observe Entry, Inspection and Operative Safety

1. Entry and Survey

- The surgeon selects an access method and site according to anatomy, previous surgery and clinical risk.
- Initial entry carries a risk of bowel or vascular injury even before the main operation has begun.
- After access, the clinician checks for injury and systematically surveys the pelvis and relevant abdominal structures.
- Identify the uterus, tubes, ovaries, pelvic sidewalls, bladder region and bowel, while noting adhesions or distorted anatomy.
- Inspect both sides when appropriate rather than assuming that a unilateral symptom means unilateral disease.

2. Safe Instrument Use

- Instruments are introduced and moved under appropriate visual control, with careful traction on delicate tissues.
- The surgeon identifies vulnerable structures before using energy or dividing a pedicle.
- Thermal damage may extend beyond the point of contact and can present later as a visceral injury.
- A contaminated or malfunctioning instrument is replaced instead of being used because the operation has already started.
- Conversion to laparotomy may be the safest response to bleeding, injury or inadequate exposure and is not itself a failure.

3. Completion and Recovery

- Confirm haemostasis, specimen identification and port-site closure appropriate to the size and location of the openings.
- Monitor pain, vital signs, urine output and recovery from anaesthesia after surgery.
- Mild shoulder-tip discomfort can follow residual gas, but severe or worsening pain must not be dismissed as gas pain.
- Fever, fainting, persistent vomiting, marked distension, breathlessness or inability to pass urine requires review.
- Explain the findings, activity advice, wound care and how histology results will be communicated.

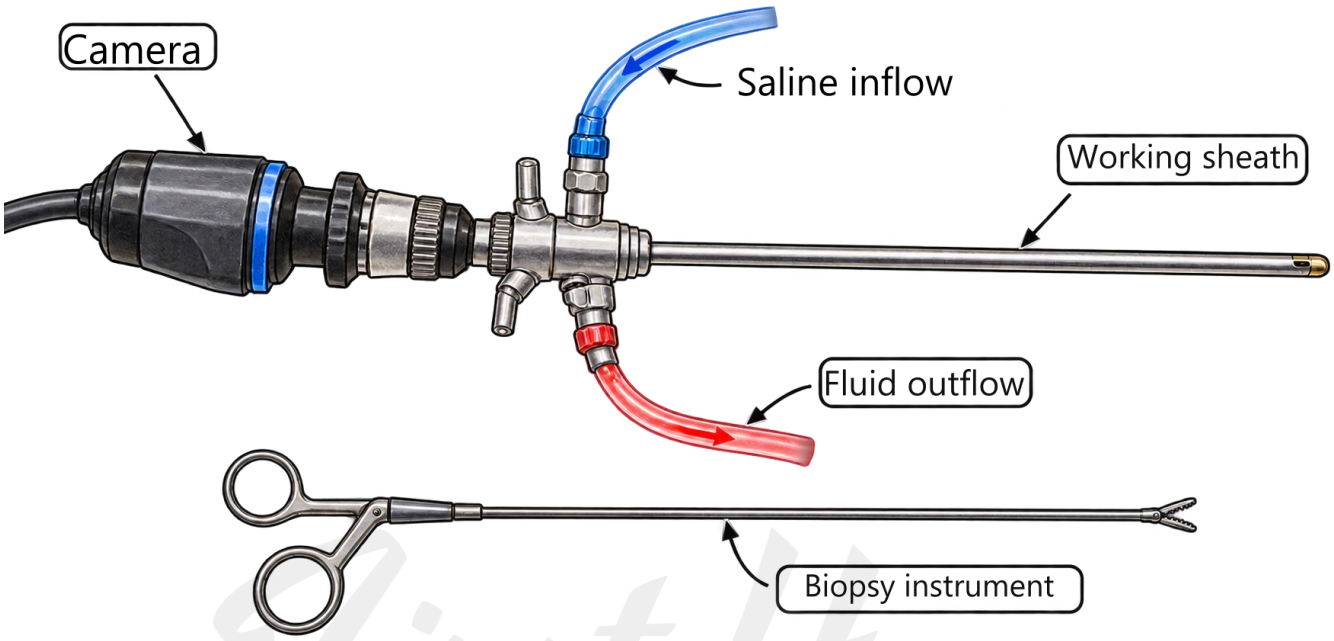
Hysteroscopy

Principle and Indications

- Hysteroscopy passes a slender telescope through the cervix to inspect the endometrial cavity.

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- A distension medium separates the cavity walls and improves visibility.
- It can identify polyps, submucosal fibroids, adhesions and other cavity abnormalities and permit directed biopsy.
- Operative instruments may remove selected lesions or treat adhesions through the working channel.
- It does not inspect the external surfaces of the ovaries and tubes in the way laparoscopy does.



An operating hysteroscope provides a view and working access while fluid inflow and outflow require careful monitoring

Consent, Comfort and Preparation

Choose the Setting with the Patient

- Explain the purpose, potential discomfort, risks, alternatives and the possibility that the procedure may need to be stopped.
- Discuss outpatient care and options involving local anaesthesia, sedation or regional or general anaesthesia where appropriate.
- A patient can choose a different setting or request time to consider the options.
- Agree on a signal to stop and respond to pain rather than assuming that a small instrument makes the procedure painless.
- Assess pregnancy possibility, infection, bleeding risk, cervical stenosis and relevant medical disease before proceeding.
- Active pelvic infection or a possible ongoing pregnancy generally requires reassessment before routine diagnostic hysteroscopy.

Prepare Equipment and Monitoring

- Check the telescope, camera, light, working instruments and compatible distension medium.

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- Ensure the fluid inflow, outflow and collection systems allow measurement of the fluid deficit.
- Set a patient-specific maximum deficit with the surgical and anaesthetic team before starting an operative procedure.
- Normal saline is used with mechanical instruments and bipolar systems, while some monopolar systems require a non-electrolyte medium.

Distension Media and Equipment Compatibility

A. Isotonic Electrolyte-containing Fluid

Excess absorption of hysteroscopic distension fluid

Isotonic saline	Hypotonic electrolyte-free medium
↓	↓
Excess absorption can cause fluid overload	Excess absorption can cause fluid overload and hyponatraemia

Monitor deficit and clinical condition; act before a limit is reached if the patient deteriorates

- Normal saline is isotonic and conducts electrical current, which suits bipolar systems designed for it.
- Excess absorption can still cause dangerous circulatory fluid overload.

B. Electrolyte-free Distension Fluid

- Some monopolar electrosurgical systems require a compatible non-conducting medium.
- Absorption of a hypotonic medium can combine fluid overload with dilutional hyponatraemia, so the medium and equipment must be matched.

Check Compatibility Before Starting

- Do not substitute an incompatible medium simply because it is available.

Observe the Procedure and Manage Risks

Entry and Examination

- The operator enters gently under vision, using a vaginoscopic or speculum-based approach as appropriate.
- Inspect the canal, cavity, fundus and tubal ostia systematically and describe the location and appearance of abnormalities.
- Take targeted tissue when indicated and ensure that all specimens are correctly labelled for histology.

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