University of Basrah
Al-Zahraa Medical College

Ministry of higher Education
and Scientific Research

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REPRODUCTIVE BLOCK

Lecture
Duration : 1 hour

Gynecological surgeries

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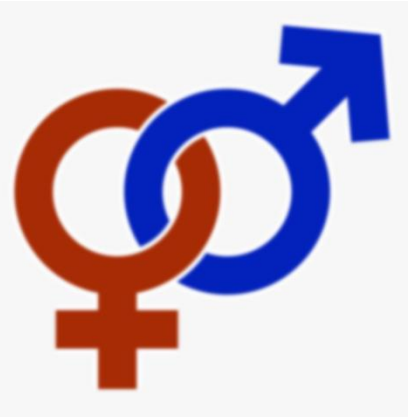
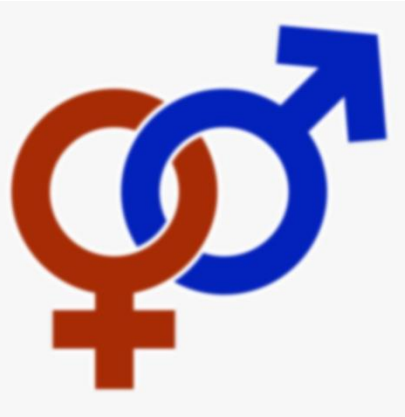
GYNAECOLOGY 20th
EDITION by Ten Teachers



Learning Objectives (LO)

1- Common gynecological surgeries .
2- Hysterectomy and its routes .
3- Complications and pre assessment of hysterectomy .
4- Postoperative care and recovery of hysterectomy .
5- Hysteroscopy indications and complications .
6- Laproscopy indications and complications .



LO 1
Gynecological surgery
Common gynecological surgeries

	Procedure	Key points	Short description	Complications
For prolapse	Anterior vaginal repair (colporrhaphy)	For anterior vaginal prolapse NOT a procedure of stress incontinence	Sutures to reinforce fascia between vaginal and bladder	Risk of bladder injury Relatively high recurrence
	Posterior vaginal repair (colporrhaphy)	For posterior vaginal prolapse Can improve obstructed defaecation Risk of recurrence is low	Sutures to reinforce fascia between vaginal and rectum	Risk of rectal injury Associated with postoperative dyspareunia
	Vaginal repair with polypropylene mesh	Usually reserved for recurrent prolapse Surgical repair reinforced with a sheet of mesh Very low recurrence rates Excellent anatomical result	Mesh can be an inlay (not fixed) or fixed to the pelvic ligaments to mimic the native uterosacral ligaments and fascial attachments	Mesh erosion through vagina (5%) Mesh erosion to bladder/rectum (<5%) Dyspareunia Chronic pelvic pain Excision of mesh is difficult
For incontienence	TVT or TOT	For stress incontinence	Tape inserted running either through both obturator fossa under bladder neck, or through retropubic space	Mesh erosion Bladder damage Voiding problems
	Colposuspension	For stress incontinence	Open procedure to elevate bladder neck and replace intrabdominally	Haemorrhage Infection Bladder damage Voiding difficulty
For asssessment of uterine cavity	Hysteroscopy	Uterus distended with saline or glycine to view cavity Performed as day case or outpatient	Cervix is dilated to enable introduction of hysteroscope. Cavity and ostia are viewed Can be used for surgical removal of polyps, septum, submucous fibroids Can be used for directed endometrial biopsy	Bleeding Perforation Infection

For miscarriage	Evacuation of retained products of conception	Now termed surgical completion of miscarriage To remove pregnancy tissue retained after miscarriage procedure for STOP is identical	Cervix is dilated Suction curette used to evacuate uterus	Bleeding Perforation Infection Need for further procedure
For cervical abnormality	LLETZ and cone biopsy	To remove transformation zone of cervix when CIN present	Transformation zone removed under local anaesthetic (LLETZ) using diathermy Or cut away under general anaesthetic with benefit of histological confirmation of excision	Haemorrhage and secondary haemorrhage from infection Preterm delivery
For assessment of pelvis	Laparoscopy	Minimal access surgery through umbilical port to view and treat pelvic organs Can be route of surgery for oophorectomy, division of adhesions, ligation or clipping or removal of tubes, removal of ovarian cysts, treatment of endometriosis Route of preference for salpingectomy or salpingostomy for ectopic pregnancy Also used for laparoscopic hysterectomy or myomectomy	CO_2 is insufflated through a Veress needle to expand the abdominal cavity and instruments are then introduced	Haemorrhage Infection Damage to pelvic organs Perforation of uterus
For fibroids	Myomectomy	Abdominal operation to remove uterine fibroids Can also be performed laparoscopically	Individual fibroids are 'shelled' out of the myometrium of the exposed uterus, which is sutured closed	Haemorrhage and haematomas requiring transfusion Adhesion formation

CIN, cervical intraepithelial neoplasia; LLETZ, large loop excision of transformation zone; STOP, surgical termination of pregnancy; TOT, transobturator tape; TVT, transvaginal tape.

LO 2
Hysterectomy

- **Hysterectomy is one of the commonest surgical procedures in gynaecology , Hysterectomy is commonly performed for heavy or painful or irregular periods, when medical treatment or less invasive surgery such as endometrial ablation has failed. When the uterus is enlarged by fibroids or significant adhesions are expected, or it is planned to remove the ovaries,**

Hysterectomy routes

Procedure	Key points	Advantages	Disadvantages
Abdominal hysterectomy	Abdominal incision Uterus, cervix removed Tubes and ovaries can be removed together at the same procedure Can be performed laparoscopically	Allows full inspection of pelvis Oophorectomy is straightforward Can remove large fibroid uterus	Abdominal incision More pain Longer recovery period *TLH/LAVH will offset these disadvantages*
Vaginal hysterectomy	Vaginal incision Cervix and uterus removed Ovaries and Fallopian tube not removed Can be combined with vaginal wall surgery Can be assisted laparoscopically	No abdominal incision Rapid recovery Suitable for spinal anaesthesia Appropriate for frail/eldery	Ovaries not removed Surgical access can be limited Not suitable for large fibroid uterus

LAVH, laparoscopic-aided vaginal hysterectomy; TLH, total laparoscopic hysterectomy.

Complications of hysterectomy

- • Haemorrhage (intra- or immediate postoperative).
- • Deep vein thrombosis (pelvic surgery).
- • New bladder symptoms (both overactive bladder and stress incontinence).
- • Higher incidence of vaginal prolapse after hysterectomy for any cause.
- • Bladder injury (uncommon).
- • Ureteric injury (rare).
- • Rectal injury (rare).
- • Vesicovaginal or rectovaginal fistula (consequence of injury) (very rare).
- • Early onset of menopausal symptoms (if ovaries left in situ).
- • Immediate onset of menopausal symptoms (if ovaries removed in premenopausal woman

Preassessment:

- **All patients will have a full blood count (FBC) and blood group and serum save (or a full cross-match in advance if significant bleeding Is anticipated), patients over the age of 50 or thereabouts, plus those with known cardiac, renal or respiratory problems, will also have serum biochemistry measured (urea, electrolytes, renal function, hepatic function), a chest X-ray and electrocardiography (ECG) performed patients with significant cardiac failure or severe respiratory disease may require echocardiography or lung function test .**

- **Patients with known coagulation disorders, or those taking long-term anticoagulants such as warfarin, can be reviewed by the haematologist**

- **The combined oral contraceptive pill (COCP) should be stopped 4 weeks prior to surgery and alternative contraception used. HRT should also be stopped .**

- **All women must be mobilized early after surgery .**

- **All women are given thromboembolic stockings (TEDS) and kept hydrated. LMWH is given according to standard risk assessment .**

LO 4
Postoperative care and recovery

- **The patient will have regular (usually 4 hourly) observations of temperature, pulse and blood pressure in the first 24 hours to identify the clinical signs of infection or hypovolemic collapse.**
- **Most patients will be given intravenous fluids for the first 12–24 hours after surgery until they can resume eating and drinking, but the timing of resumption of oral intake will vary depending on the length of surgery, whether the abdominal cavity was opened and whether there were any intraoperative complications that might require delayed oral feeding .**
- **For all cases of either abdominal or vaginal surgery, the abdomen should be palpated for localized tenderness (suggesting a hematoma or focus of infection), peritonism or distension, and bowel sounds should be checked (for return of peristalsis and exclude obstruction or ileus).**

- **The abdominal wound should be checked for inflammation, bruising or discharge. If drains are present, these should be checked.**

- **Routine blood sampling for haemoglobin concentration can be done on the second postoperative day, and urea and electrolytes will need to be checked for those patients who remain on intravenous fluids.**

- **It is common to see a low-grade pyrexia in the first 24-48 hours as a manifestation of the release of acute phase proteins, particularly interleukin-1and this will usually settle without intervention. Persistent pyrexia, or pyrexia above 39°C, should be treated. After clinical examination to exclude obvious wound infection or chest infection**

- **Wound dressings should be removed by 72 –48hours after surgery and abdominal wound sutures are usually removed on day 5 for Pfannenstiel incisions or day 10 –7 for midline incisions.**

LO 5

Hysteroscopy

- **Hysteroscopy involves passing a small-diameter telescope, either flexible or rigid, through the cervix to directly inspect the uterine cavity**

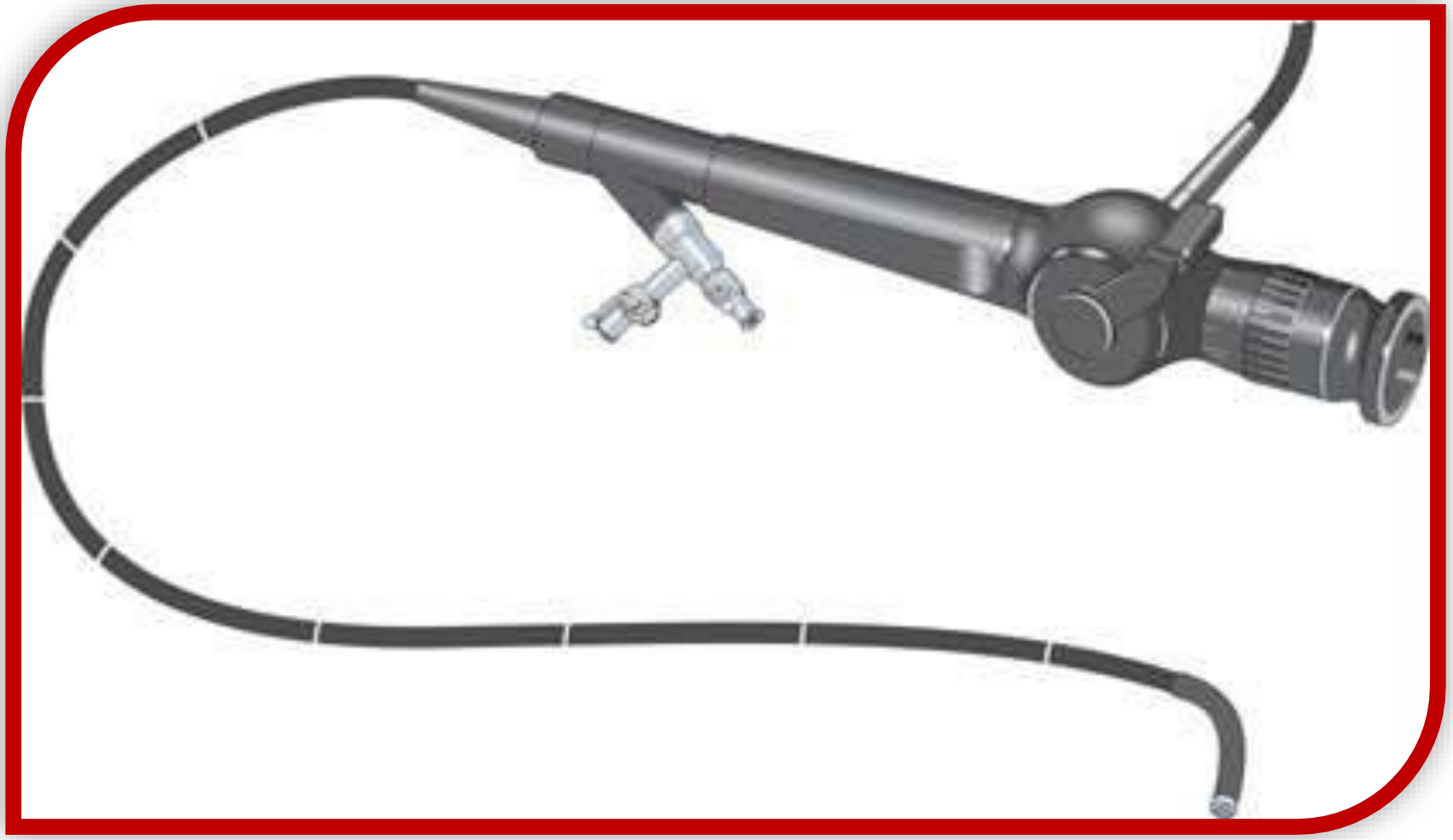
Indications

- • **Postmenopausal bleeding.**
- • **Irregular menstruation, intermenstrual bleeding and postcoital bleeding.**
- • **Persistent heavy menstrual bleeding**
- • **Persistent discharge.**
- • **Suspected uterine malformations.**
- • **Suspected Asherman’s syndrome.**
- • **Essure hysteroscopic sterilization**

Complications

- Perforation of the uterus.
- Cervical damage – if cervical dilatation is necessary.
- If there is infection present, hysteroscopy can cause ascending infection.
- An operating hysteroscope can also be used to resect endometrial pathology such as fibroids and polyps and uterine septums

Flexible fiberoptic hysteroscope



View of endometrial cavity demonstrating Asherman's adhesions

LO 6
Laparoscopy

- **Laparoscopy allows visualization of the peritoneal cavity. This involves insertion of a needle called a Veress needle into a suitable puncture point in the umbilicus. This allows insufflation of the peritoneal cavity with carbon dioxide so that a larger instrument can be inserted**

Indications :

- **• Suspected ectopic pregnancy.**
- **• Ovarian cyst accident and acute pelvic pain.**
- **• Undiagnosed pelvic pain.**
- **• Tubal patency testing.**
- **• Sterilization.**

- **Operative laparoscopy can be used to perform ovarian cystectomy or oophorectomy and to treat endometriosis with cautery or laser .**

Complications :

- **Complications are uncommon, but include damage to any of the intra-abdominal structures, such as bowel and major blood vessels**
- **The bladder is always emptied prior to the procedure to avoid bladder injury**
- **Incisional hernia has been reported**

Laparoscopic view of bilateral endometriomas

THANK YOU