Endometriosis

Characterised by extra-uterine endometrial tissue, e.g. ovaries, uterosacral ligaments, pouch of Douglas, omentum, rarely umbilicus, scar sites, pleura, pericardium, and the central nervous system. Adenomyosis is the invasion of the myometrium by endometrial tissue.

Epidemiology

- Prevalence 1% to 15%.
- Almost exclusively in women of reproductive age. Regresses in pregnancy or menopause.
- OCP reduces the risk of developing endometriosis.

Risk Factors

- First-degree relative with endometriosis
- Early menarche and late menopause.

Presentation

History: Asymptomatic or dysmenorrhoea, dyspareunia, non-cyclic pelvic pain, and subfertility.
Exam: Often normal. Adnexal or posterior fornix tenderness. Speculum exam may show bluish haemorrhagic nodules in the posterior fornix or other sites.

Differential Diagnosis

- O&G: PID, ectopic, ovarian cyst torsion, primary dysmenorrhoea, adenomyosis, fibroids
- GIT: Appendicitis, diverticulitis, irritable bowel disease

Investigations

- Laparoscopy (gold std). Cystic lesions on ovaries ('chocolate cysts'), or adnexal masses
- Transvaginal ultrasound scanning to make or exclude the Dx of ovarian endometrioma.

Management

Analgesia: NSAIDs. Paracetamol. Avoid opioid dependence.
Suppress ovarian function: if patient doesn't want to conceive

- Combined OCP, **danazol**, oral or depot **medroxyprogesterone acetate**, **levonorgestrel** intrauterine system (**Mirena®**), GnRH analogues

Surgical:

- Laparoscopic excision or ablation (thermal/laser), ovarian cystectomy.
- Hysterectomy with salpingo-oophorectomy as a last resort.

Fertility:

- IVF (lower success than usual)

Complications

- Higher risk of ovarian cancer, breast cancers, autoimmune and atopic disorders.
- Adhesions, fixed retroverted uterus
- Subfertility & infertility
- Ectopic pregnancy

Prognosis

- Med Rx: 40% recurrence, 50-75% pregnancy rate.
- Surgery: 20% recurrence, 35-60% pregnancy rate depending on severity.

Endometrial Leiomyomata (Fibroids)

Benign tumours of the smooth muscle cells of the uterus (myometrium).

Classification

- Intramural (70%)
- Growing into uterine cavity (10%)
- Growing outwards from the uterus (20%)

Epidemiology

- Most common non-cancerous tumours in women of childbearing age.
- Most common indication for hysterectomy.
- Clinically apparent in up to 25% of women.
- RF: high BMI, non-smokers, Black women
- Protective: Pregnancy, OCP

Presentation

History: 50% asymptomatic. Symptoms depends on their size, position and condition. Usually present between 30-50y with menorrhagia, dysmenorrhoea, pressure symptoms, recurrent miscarriage or infertility.
Examination: Palpable abdominal mass arising from the pelvis, enlarged irregular uterus, anaemia

Differential diagnosis

- Dysfunctional uterine bleeding
- Endometriosis, Endometrial polyps, endometrial carcinoma
- Chronic PID or tubo-ovarian abscess
- Pelvic mass DDx: pregnancy, gynae Ca, bowel Ca, appendix abscess, diverticular abscess

Investigations

Blood: βhCG, FBC, iron studies
Imaging: USS, CT/MRI, Hysteroscopy with biopsies

Management (If symptomatic)

Medical

- NSAIDs e.g. mefenamic acid to reduce menstrual blood loss and dysmenorrhea
- Antifibrinolytic agents, e.g. tranexamic acid, to reduce menorrhagia
- Combined OCP if women also require effective contraception
- Danazol reduces menorrhagia by suppressing gonadotropin secretion and abolishing cyclical ovarian function
- GnRH agonists (buserelin, goserelin) reduce size but rapidly regrow when ceased

Surgical

- If family incomplete: Myomectomy (laparoscopic or hysteroscopic)
- If family complete: Total hysterectomy or uterine artery embolisation

Complications

- Iron-deficiency anaemia, bladder frequency, constipation, torsion, hydronephrosis
- Infertility, recurrent miscarriage, red degeneration, IUGR, prem labour,

Prognosis

- Typically regression at the menopause and unless on HRT.

Endometrial Carcinoma

Mainly oestrogen dependent adenocarcinoma.

Epidemiology

- ~1% women
- Usually post menopausal, rare <40y

Risk Factors

Prolonged periods of unopposed oestrogen (i.e. no progesterone) are the main risk factor.

- Nulliparous
- Menopause past the age of 52
- Obesity
- PCOS
- T2DM
- Hereditary non-polyposis colon cancer
- Tamoxifen (anti-oestrogen for breast but pro-oestrogen effect on endometrium)
- Oestrogen only HRT (unfortunately Br Ca the other way around).

Combined OCP protective – effect lasts 10-15y after ceasing.

Presentation

History: Classically, postmenopausal bleeding. In other ~20-25% cases menstrual irregularities.
Examination: Usually normal.

Investigation

Transvaginal ultrasound (endometrial thickness>5mm), hysteroscopy, endometrial biopsy

Management

Early stage: THBSO
Later stage: surgery + radiotherapy (external beam or intra-cavity)
Advanced/metastatic disease: Pro-gestational agents may be added.

Prognosis

Fairly good.
Overall 20y survival rate ~80% as most women present in Stage I.