CONTENTS

Secondary Dysmenorrhoea

- Associated pathology
- Adenomyosis, endometriosis, PID, fibroids
- Pain often precedes and is then relieved by onset of mestruation
- Treat the cause

Intermenstrual Bleeding

- May follow a mid-cycle fall in oestrogen production
- Other causes: cervical polyps, ectropian, carcinoma, cervicitis/vaginitis, hormonal contraception, IUCD, chlamydia, pregnancy
- Can treat with IUS or COCP
- If polyp this can be removed and sent for histology

Post-coital Bleeding

- Cervical trauma, polyps,
- Cervical, endometrial and vaginal carcinoma
- Cervicitis and vaginitis
- When cervix is NOT covered in healthy squamous epithelium it is more likely to bleed after mild trauma

- Inspection of cervix, carry out smear
- If polyp this can be removed and sent for histology, if normal can undergo cryotherapy if abnormal colposcopy needed
- Screen for chlamydia
- Refer all with persistent bleeding
- Risk of cervical carcinoma is 1 in 2400 if aged 45-54

Polycystic Ovary Syndrome

Polycystic Ovary: characteristic transvaginal USS appearance of multiple (12+) small (2-8mm) follicles in an enlarged (>10ml) ovary

Polycystic Ovary Syndrome: 2+ of

- Ovaries with polycystic morphology on USS
- Irregular period 5+ weeks apart
- Hirsutism (acne, excess hair, raised serum testosterone)

- Comprises hyperandrogenism, oligomenorrhoea and polycystic ovaries on USS
- Unknown cause
- One of most common endocrine disorders in women of child-bearing age 5-20%
- Many women are obese or have metabolic syndrome
- Associated with higher risk of Type 2 diabetes and sleep apnoea

- Usually asymptomatic but can cause IMB or PCB
- Treatment: if young can be avulsed but if post-menopausal then TVS +/- hysterectomy to exclude intrauterine polyps

Dermoid Cyst

- Common benign tumour
- Usually in young pre-menopausal women
- May contain fully differentiated tissue of ALL cell lines most commonly hair & teeth
- Usually bilateral
- Rarely large so are usually asymptomatic
- BUT if rupture this can be severely painful
- A malignant form = solid teratoma can occur in this age group but is rare

Vaginal Discharge

Physiological Discharge
- Pregnancy
- Sexual arousal
- Puberty
- COC

Bacterial Vaginosis
- Most common cause of vaginal discharge
- Occurs 10%
- Usually asymptomatic
- Any discharge has fishy odour
- Vaginal pH >4.5
- Stippled vaginal epithelial clue cells may be seen on wet microscopy
- There is altered bacterial flora → overgrowth
- Treat with Metronidazole or Clindamycin

Thrush
- 2nd most common cause
- 95% caused by C. albicans
- Vulva and vagina may be red and fissured, sore
- Discharge is non-offensive, white curd like
- Diagnose via microscopy and culture
- Treat with Clotrimazole

Level 2

- Mid portion of vagina is attached by endofascial condensation laterally to pelvic side walls

Level 3

- Lower third of vagina is supported by levator ani muscles & perineal body
- The levator ani muscles form the floor of the pelvis & incorporate the perineal body in the perineum

Prolapse Pathophysiology

- Occurs when support structure is weakened through: direct muscle trauma neuropathic injury, disruption, stretching

Risk Factors

- Increasing age
- Vaginal delivery/use of forceps
- Increasing parity
- Obesity
- Previous hysterectomy
- Increased birth weight
- FHx of prolapse
- Constipation
- CT disorders e.g. Marfans, Ehler's-Danlos

Epidemiology

- 40-60% of parous women
- 1 in 12 women in UK report symptoms

Types of Prolapse

Anterior Compartment Prolapse

Urethrocele: prolapse of urethra into vagina, usually associated with urinary stress incontinence

Cystocele: prolapse of bladder into vagina

Cystourethrocele: prolapse of both urethra & bladder

Middle Compartment Prolapse

Uterine: descent of uterus into vagina

Vaginal vault: descent of vaginal vault post-hysterectomy often associated with cystocele, rectocele & enterocele

EMERGENCY GYNAECOLOGY

Acute Pelvic Pain

Differentials

Gynaecological	Surgical	Urinary
Adnexal/Ovarian cyst torsion	Appendicitis	UTI
Ovarian cyst rupture		Renal colic
Ovarian cyst haemorrhage		
Ectopic pregnancy		

- Rupture, torsion or haemorrhage of an ovarian cyst

- Torsion would usually cause vomiting and systemic upset with an adnexal mass visible on USS
  → Torsion is a gynae emergency
  → More common in young women and teenagers
  → If adnexal mass confirmed on USS then laparoscopy should be performed ASAP as torsion is associated with loss of ovarian function due to ischaemia & necrosis
  → Should be managed with detorsion with possible fixation of ovary to the uterus or pelvic side wall
  → If gangrenous then salpingoophorectomy is indicated

- Haemorrhage would be seen on transvaginal USS as an echogenic ovarian enlargement

- If a cyst rupture it is common for the ovary to appear ultrasonographically normal afterwards, there may be free peritoneal fluid in the Pouch of Douglas which is suggestive of a rupture.
  → Can be managed expectantly with analgesia
  → Increased incidence of ovarian cysts in those who use POP

SUBFERTILITY

Infertility: inability to conceive after 1 year of unprotected intercourse
Primary infertility: no prior pregnancies of any kind
Secondary infertility: previous pregnancy but current difficulty conceiving

- ! 84% of couples having regular intercourse will conceive within 1 year, 92% by 2 years
- ! Offer investigation after 1 year of trying
- ! Fertility decreases with age
- ! PCOS is most common cause of anovulation 80%

Causes

- Anovulation 21% → may be caused by premature ovarian failure, Turner's, surgery, chemo, weight loss, PCOS, exercise
- Male Factor 25%
- Tubal Factor 15-20%
- Unexplained 28%
- Endometriosis 6-8%

Male Infertility (20%)	Female Infertility (60%)
Oligospermia	Ovulatory Disorders (20%)
Antisperm antibodies	Tubal Disease (25%)
Undescended testes	Endometriosis (10%)
Varicocele	Hostile cervical mucous (5%)
Scrotal hyperthermia	
Erectile failure	
Rarer causes e.g. chromosomal abnormality such as Klinefelter's; pituitary tumours or infection s e.g. mumps	

History

Male	Female
Recent illness	Coital frequency
Drugs, smoking, excessive alcohol	Menstrual history
Mumps, orchitis	History of pelvic infection or surgery
Previous testicular surgery	Contraception use in past especially IUCD
Problems with erection or ejaculation	
Exposure to toxins or radiation	