Genitourinary Teaching

Vaginal discharge

Physiological causes:
Cervical ectopy
Lactobacilli - healthy

Pathological causes:
retained tapon, condom
candidiasis
bacterial vaginosis
trichomoniasis
cervicitis

Bacterial Vaginosis
Normal flora replaced with overgrowth of mixed flora, primarily anaerobes.
Presentation may be asymptomatic, white discharge, malodour. No erythema.
Diagnosis by microscopy of discharge. Amine test can be used.
Complications include pelvic inflammatory disease, early or late miscarriage.
Treat with metronidazole or clindamycin.

Candidiasis
75% women have one or more symptomatic episodes in life.
c albicans 90%
c glabrata 5%
(others rare)
Presents asymptomatically or with any of pruritis, soreness, dysuria, vulvo-vaginitis, watery or 'cottage cheese' discharge.
Diagnose by microscopy and culture.
Treat with topical imidazoles or polyenes, oral triazoles (e.g. fluconazole), nystatin.
(Natural yoghurt, Boric acid, garlic, etc may have some use)

Trichomonas (usually STD)
Protozoa, seen on wet mount slide
Presents with vulvo-vaginitis, discharge - yellow +/- froth, or asymptomatically.
Men - usually asymptomatic. Occasionally with urethritis (dysuria, discharge). Not usually looked for.
Treat with metronidazole, trace + treat sexual contacts.

Cervicitis
Most common causes:

- Chlamydia
- HSV
- Neisseria
- (Non-specific)

Micropurulent secretions and contact bleeding.

Genital warts

Differential:

- hirstutes papillaris penis (normal)
- vulval papillomatosis (normal)
- molluscum contagiosum
- fordyce spots (ectopic sebaceous gland)
- pilosebaceous glands
- condylomata lata (secondary syphilis)
- skin tags
- neoplasms

Warts usually hard, maintain ice on cryotherapy, acetic acid turns white, cauliflower appearance to the surface. Incubation period is 2 weeks to over a year. HPV 6 and 11 are most common cause of warts, 14 and 16 most commonly lead to cancer (or over 100 variants). Hence cervical warts a risk factor for cancer, but most of those infected do not go on to develop cancer.

Treatment:

- Topical podophyllotoxin or imiquimod
- Ablation, commonly cryotherapy. Also laser or diathermy.
- Surgical excision

A significant minority recur.
Screen for other STD, contact tracing.

STD peak: ♀19-20, ♂21-25

Urethritis

Dysuria in young males is usually urethritis not cystitis. Symptoms of urethritis include:

- Dysuria
- Discharge
- Frequency
- Penile irritation
- (Asymptomatic)

Confirmed by 4+ pus cells per HPF on urine microscopy.
If urine cloudy, add acetic acid. If cause is phosphaturia it will clear. Remaining cloudy is suggestive of pus.
General protocol:

- Treat cause
- No sex until cleared
- Contact tracing
- Follow up

Classify as gonococcal or non-gonococcal.

Gonococcal

Gram –ve diplococci
2-5 days incubation
May be heavy discharge, but often asymptomatic

Also causes:
- Epidiymitis
- Proctitis
- Pharyngitis
- Septicaemia (rarely)

Treat with cephalosporin or ciprofloxacin (stat dose, some resistance) +/- tetracycline

Non-gonococcal causes
- Chlamydia (most common)
- Mycoplasma genitalium
- Ureaplasma urealyticum
- Trichomonas
- Herpes simplex (severe symptoms)
- Anaerobes
- Traumatic
- Reactive (e.g Reiter's syndrome)

Chlamydia
Incubation 2-3 wks

Male
- Urethritis
- Epidiymitis
- Proctitis
- Pharyngitis

Female
- Cervicitis
- Urethritis
- Pelvic inflammatory disease
- Perihepatitis
- Proctitis
- Pharyngitis

Treat with tetracycline, erythromycin, or azithromycin (stat dose). If pregnant, use amoxycillin, erythromycin, (azithromycin)

Guidelines for treatment of STD:
www.bashh.org