CASE 5

Short case number: 3_4_5
Category: Endocrine & Reproductive Systems
Discipline: O&G
Setting: General Practice
Topic: – vulvovaginitis – legal [SDL]

Case

Joanna Grey is aged fifteen. She presents to her general practitioner complaining of a smelly vaginal discharge. She knows it smells because her brother has told her she 'stinks'.

Questions

1. Summarise the key steps in development in the following categories: breast, abdomen, uterus and tubes, ovaries, vagina, hymen, and vulva.
2. Describe the changes in appearance of cervical mucous through the menstrual cycle related to hormone changes.
3. List the infections that change the appearance of vaginal discharge and describe these changes and the treatment options.
4. Taking into account the tone of her brothers comments outline the key steps in history, examination and investigation in this case.
5. Outline the management options available when a woman reports past or present sexual or physical abuse.

Suggested reading:

- Abbott, J., Bowyer, L., & Finn, M. (2014). *Obstetrics and Gynaecology: an evidence-based guide (2nd ed).* Australia, Elsevier. Chapter 2 & 5

ANSWERS

1. **Summary of Key steps in development**

Breast (Thelarchy)

Buds @ birth

Occasional transient enlargement in response to in utero oestrogen – no investigations unless bilateral and PV bleeding

Biopsy of bud may lead to long term deformities

Tanner stages – 1 is 0-6 years of age and 5 is mature breast

Uterus and tubes

At birth Cx/Corpus ratio is 2-3:1

At puberty Cx/Corpus ratio is 1:2

NB – may have withdrawal bleed in first 10 days of life due to withdrawal of (mother's) exogenous oestrogen

Ovaries

@ birth – follicles ,1cm but possible to have enlarged cysts (again – exogenous oestrogen withdrawal and postnatal surge of gonadotrophins)

About 5,000,000 follicles

Age 5 – ovaries begin to grow

Ovulation occurs after 12-15 cycles but beware not always! – think contraception

Vagina

Pre-pubertal vagina – 4 cm long, red (thin epithelium due to NO oestrogen), alkaline environment.

Clear / pink discharge is possible and normal –

Hymen

Prominent in newborn and well oestrogenised

Variety of canalisations

Puberty – will allow tampon entry (1cm canalisation)

Vulva

Hairless until adrenarche

Tanner stages 1-5 – significant racial differences in hair

@ birth – prominent labia and clitoris but recedes until puberty (lack of E)

2. **Appearance of cervical discharge**

Preovulation Nil until high levels oestrogen late in follicular phase and at ovulation mucous copious, watery and stretchy resembling thin egg white

Post ovulation – Drop in oestrogen, rise in progesterone and mucous thick and gelatinous.

3. Vaginal discharges, organism, appearance and treatment

Normal discharge - Clear to white. Normal amount discharge varies.

Candida yeast - candida albicans

White curd like discharge - vulval pruritis

Nystatin vaginal creams/ pessaries 7 days

clorimazole vaginal creams/pessaries
Oral

Bacterial Vaginosis - anaerobic – gardnerella vaginalis, bacteroides species
Malodorous white- grey frothy discharge
Metronidazole oral / tinidazole
Vaginal clindamycin cream nocte 7 days

Trichomonas Anaerobic protozoon Trichomonas vaginalis
Malodorous white to greenish frothy discharge
Single 2 gram dose metronidazole or tinidazole treat sexual partner

Chlamydia Chlamydia trachomatis
Creamy cervical discharge/ post coital bleeding
Single dose azithromycin I gram orally / doxycycline 100mg bd 7 days (erythromycin 500mg bd in pregnancy). Longer treatment if symptomatic. Treat partners in past 6/12.

Gonorrhoea Neisseria gonorrhoeae
Purulent cervical discharge
Single dose IMI ceftriaxone 500mg

4. History, examination and investigation vaginal discharge

- History includes detail of discharge, smell, appearance and change through cycle. How long present, menstruation, menarche, intermenstrual and post coital bleeding.
- Follow up statement 'brother thinks she stinks'.
- Has there been inappropriate touching, sexual contact from brother or others. Explore her knowledge of her own anatomy and its function.
- Violence against women can be overt as in sexual/ physical abuse but also more subversive as derision towards menstruation, female genitalia. Has her self esteem been effected by above?
- Examination and investigation. If sexually active speculum examination of pelvis and cervical, urethral and vaginal swabs. MC&S, chlamydia PCR. Cervical Screening Test +/- cervical cytology (Co-test) if any IMB/PCB.

If not sexually active first catch urine gonorrhoea & chlamydia PCR and vaginal swab without speculum.

5. Outline the management options available when a woman reports past or present sexual or physical abuse.

- While taking a history create an atmosphere of privacy, trust and empathy so a woman feels safe to discuss her situation.
- Be sensitive as this may be the first time in her life she has revealed these details. Do not be dismissive of her fears and explore the history she reveals.
- She may not be safe in her present environment and the police at her request may need to become involved.
- Referral to medical practitioner experienced in this area.

Resource:

http://www.communityservices.act.gov.au/ocyfs