Vulvovaginitis and other pre-pubertal vulval problems

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Background

It is normal for newborns to have a mucoid white vaginal discharge, which usually resolves by age of 3 months. Vaginal bleeding in the first week of life is also normal, and results from withdrawal of maternal oestrogen.

Vulval irritation is common in pre-pubertal girls. Symptoms include redness, soreness and itching of the vulva, vaginal discharge, and dysuria.

It occurs due to the thin, unoestrogenised vaginal mucosa; and a more alkaline pH, and can be caused by:

- excessive moisture – synthetic clothing, tight clothing, swimming clothes, obesity
- irritants – soap, bubble baths, antiseptics
- poor hygiene / toileting habits

Other causes to consider for persistent problems include:

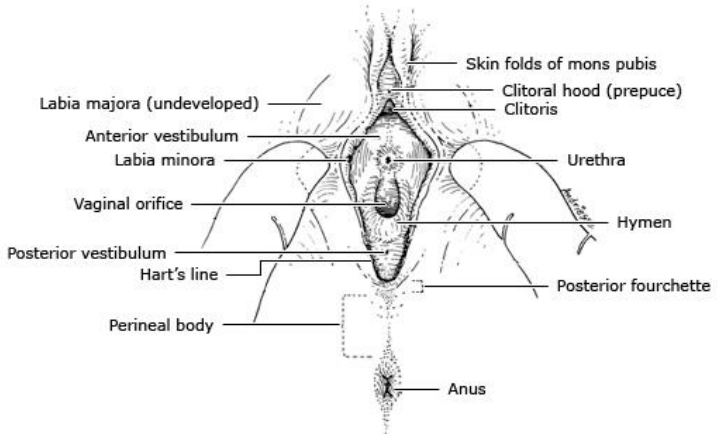
- infection with group A strep / gardnerella / other respiratory or gut flora
- threadworm infection
- foreign body
- sexual abuse – chronic masturbation or sexually transmitted infections (N.gonorroheae, C.trachomatis, T.vaginalis) – see **child sexual abuse guideline**.
- Dermatological problems such as eczema, lichen sclerosus, psoriasis

Candidal infection is uncommon in the pre-pubertal age group but can occur in children who are immunosuppressed, have had recent antibiotics, or who wear nappies.

Assessment

Girls should be examined gently and sensitively with a parent and chaperone present.

The best position to examine the child is in the frog-leg position i.e. supine with feet together, knees flexed, hips abducted.



Use the anatomy sticker to document your findings

Vaginal swabs are rarely necessary but if done, swab the labia or introitus only.

Management

Explanation of the problem and reassurance is very important.
Provide a **leaflet**

Advice:

- Avoid causal factors:
  - Avoid bubble baths or perfumed soaps.
  - Clean perineal area with water only. Ensure genital area dry.
  - Wear cotton underwear. Double rinse after washing underwear.
  - Avoid tights, leotards and leggings. Loose fitting clothing.

- Review toileting hygiene with child. Emphasise front to back wiping.
- Can use cool compresses on tender and swollen areas. Emollients or non-medicated barrier creams can soothe.
- Vinegar bath may help (half a cup of white vinegar to a shallow bath).

For persistent vulvovaginitis:

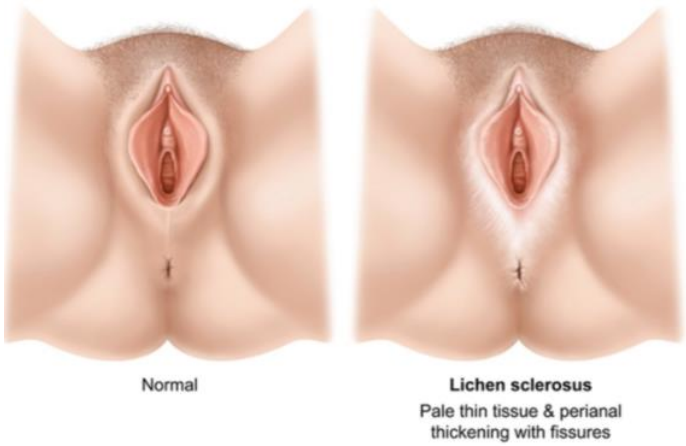
1. Consider threadworm infection if perianal / vulval itching is a major symptom. Treat with mebendazole as per BNF.
2. Consider bacterial overgrowth with a single organism if discharge is profuse or offensive, or if there are typical features of infection with group A strep (“beefy red” painful vulvovaginitis). Take a swab and consider empirical treatment with penicillin V if findings are typical, otherwise use co-amoxiclav. Penicillin allergy: clarithromycin (> 1 month old) or azithromycin (> 6 months old). Doses as per BNFc.
3. Consider a vaginal foreign body for persistent offensive / bloody discharge. Refer to Paediatric Surgery.
4. If other treatments are ineffective, consider a short course of topical oestrogen cream (Estriol 0.01% cream, twice daily for 2 weeks).

For persistent problems, consider a referral to the Paediatric Surgery outpatient clinic, or to Miss Heather Brown, Consultant Gynaecologist.

Other pre-pubertal vulval conditions:

Lichen sclerosis

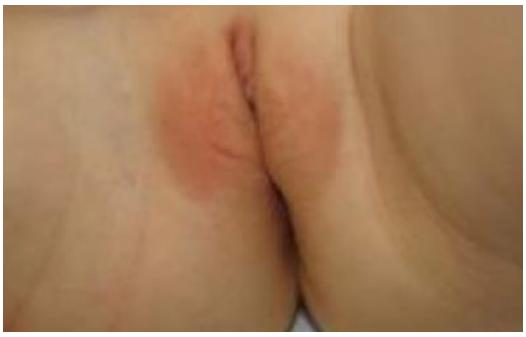
- The second most common vulval skin change (after vulvovaginitis)
- Inflammatory dermatological condition of unknown aetiology. Characterised by intense vulval itching. Can involve other parts of the perineum. Features include a pearly, translucent appearance (pale, atrophic patches) around vulva and anus +/- soreness and bleeding.



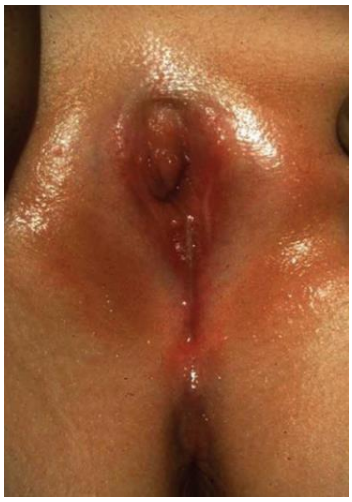
- Scratching can sometimes lead to purpuric haemorrhage into the skin, confusing it with sexual abuse.
- Treatment is with topical steroid cream (e.g. **dermovate**) on a variable dosing schedule over a period of weeks.
- **Refer to gynaecology** registrar for confirmation of diagnosis and treatment advice. May need to be referred to gynae clinic. Also refer to Dermatology outpatients.
- Provide an information leaflet: **https://britspag.org/wp-content/uploads/2019/07/Lichen-Sclerosus-BritSPAG-Information-Leaflet-2018.pdf**

Lichen Simplex (vulval dermatitis)

- Caused by persistent itching and scratching of the vulvar skin, which results in a thickened, leathery appearance (lichenification).
- Common in young people with sensitive skin or eczema and may extend onto thighs or pubic area.
- Worsened by stress and chemical irritants. Avoid irritants and treat underlying dermatitis / eczema
- **Refer to gynaecology** registrar for confirmation of diagnosis and treatment advice. May need to be referred to gynae clinic. Also refer to Dermatology outpatients.



Labial Adhesions (labial fusion)



- Common - affects up to 3% of pre-pubertal children; peak at 2-4 years. Normal variant. Usually resolves spontaneously.
- Caused by low oestrogen levels; recurrence is high
- There is no evidence that CSA causes adhesions
- May present with poor urinary stream, UTIs or as an incidental finding
- **Refer to gynae registrar** for confirmation of diagnosis and initiation of oestrogen cream (only required if symptomatic i.e. UTIs). May need to be referred to gynae clinic.
- Provide an information leaflet: **https://britspag.org/wp-content/uploads/2019/07/Labial-fusion-BritSPAG-Information-Leaflet-2018.pdf**