LRI Children's Hospital

Vulvovaginitis (includes vaginal discharge/vulval irritation) in pre-pubertal girls

Staff relevant to:	Clinicians treating pre-pubertal girls within UHL Children's Hospital
Team approval date:	January 2022
Version:	4
Revision due:	January 2025
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Trust Ref:	C28/2005

1. Introduction and Who Guideline applies to

Vaginal discharge in pre-pubertal girls is the commonest paediatric gynaecological problem presenting to General Practitioners, Paediatricians and Gynaecologists.

2. Guideline Standards and Procedures

Vaginal discharge

The newborn female often has a clear or white odourless vaginal discharge, occasionally blood-stained, which is as a result of circulating maternal oestrogen. This clears within a few weeks when the effect of maternal oestrogen wears off. The genital tract then becomes hypooestrogenic in which state it will remain until puberty. During this hypo-oestrogenic phase, the most common cause of vaginal discharge is bacterial infection commonly known as vulvovaginitis. Candidal infections are uncommon unless the child has diabetes mellitus.

Vulvovaginitis

This the most common cause of vaginal discharge in pre-pubertal girls. There are two types depending on the source of infection:

1. Specific – source of infection is a focus elsewhere commonly sore throat. This type of infection resolves with the resolution of primary infection either spontaneously or after a course of systemic antibiotics.

2. Recurrent non-specific infections – this group of patients present with persistent or recurrent green or yellow offensive vaginal discharge. It is this group of patients who present commonly to the doctors for advice.

Predisposing factors:

1) Hormones – Hypo-oestrogenic state is associated with thin and atrophic vaginal mucosa, thin labia and alkaline pH which predisposes for infection
2) Anatomy – The proximity to the anus contributes to the increased risk.
3) Hygiene – Poor hygiene is often associated, in particular wiping the perineum back to front puts them at high risk.

Clinical features

Common age group is 2 to 7 years. Vaginal discharge, redness and itching are the most common clinical features. Discharge can be green or yellow, profuse and offensive. Blood stained vaginal discharge makes the possibility of foreign body very likely. Scratching leads to excoriation, which may cause dysuria and incorrect diagnosis of urinary tract infections. Pain can be an associated feature.

It is common to encounter extremely anxious parents. Parents worry of allegations of sexual abuse, long-term complications including tubal damage and infertility.

A thorough inspection of the perineum for evidence of inflammation should be undertaken. Examining is easiest with girl supine and legs in frog-legged position. Internal examination is not necessary and should not be attempted. Child's underwear can be inspected to confirm the presence of discharge.

Investigations

Routine swab from introitus is not helpful. A major question in the management of vulvovaginitis is whether bacteria isolated is the actual cause of symptom or part of the normal vaginal flora. Important thing is not so much which specific organism but that infections are almost exclusively bacterial and NOT CANDIDA.

Management:

The management of recurrent vaginal discharge is a mixture of:

- Reassurance
- Advice
- Persistence

There is no short answer or simple cure.

Reassurance:

Educate parents and reassure that the condition is common, self-limiting and will improve after puberty. It may also be wise to mention that the consequences are not those of the genital tract infection in adults, which may result in PID and tubal damage. Most parents worry of allegations of sexual abuse. Reassurance that it does not mean so is helpful provided you can be reasonably sure about this.

Advice: is mainly to prevent and minimise recurrences.

a) Hygiene- girls should be advised to wipe her perineum after defecation from front to back

b) Diet - As vulvovaginitis seems to be more common among girls who are constipated or overweight, appropriate dietary advice should be given.

c) Clothes- should always wear cotton pants. Avoid wearing tights and trousers, especially synthetic variety, when the soreness is particularly bad.

d) Toiletry - Use a non-scented soap and avoid harsh soaps and bubble baths.

Treatment:

- Salt bath- is helpful when soreness and discharge is very bad. The easiest way is to put 2 large tablespoonful salt to the bath and sit in the bath for 10 minutes.

- Emollient creams- after bath dry the area and apply emollients to prevent further irritation. These creams are best applied at least twice a day. These include E45, Sudocrem, Diprobase and Vaseline. Vaseline is advisable to protect from swimming.

- Antibiotics –'Antibiotics are rarely indicated. If the discharge is profuse, offensive and green, send a swab for MC&S, and consider treatment in line with the results.

- Antifungals - As candidal infection is extremely uncommon (except in diabetes mellitus) in pre-pubertal girls, topical antifungal cream like Canesten or combination with steroids like Timodine, Daktacort are best avoided.

- Topical oestrogen cream – should improve vaginal epithelial thickness and increase resistance to infection. The main drawback of using topical oestrogen is the effect of systemic absorption inducing breast development and even menstruation in extreme cases. A short course of 2 weeks may be used in resistant cases to convince parents that oestrogen in puberty will clear the condition.

Persistence: is required as naturally the parents are concerned and will often return in the hope that some magic cure can be offered. They require continual reassurance on the cause and self-limiting nature of this condition.

Parent information can be found on YourHealth (either click on link or search vulval inflammation)

Referral to the Paediatric Gynaecology clinic: should be considered in the following situations, as they may need examination under anaesthesia (EUA):

• Blood stained discharge- likely foreign body

• No response to management outlined above

Differential diagnosis:

Vulval irritation with/without vaginal discharge can be:

• Threadworm infestation- consider sellotape test. Treatment is single dose of Mebendazole 100mg to all the family members over the age of 2 years with the exception of pregnant females.

• Dermatology conditions- Lichen sclerosis, psoriasis, eczema, vulval warts

• Allergic/nonspecific vulvitis

Consider discussing with Specialist team when relevant with regards to possible differential diagnosis.

Any concerns of Child Sexual Abuse: discuss with the Consultant in Charge and discuss with the Safeguarding Children Team. Do not discharge the patient home. Follow the UHL safeguarding policy on Child Sexual Abuse (CSA).

3. Education and Training

None

4. Monitoring Compliance

What will be measured to monitor compliance	How will compliance be monitored	Monitoring Lead	Frequency	Reporting arrangements
Feedback or comments when leaflet used by colleagues	At time of next guideline review unless urgent need for review identified prior	Dr Shenoy	5 years	CPM meeting When next guidelines reviewed

5. Supporting References

1. Garden AS. Paediatric and Adolescent Gynaecology 1998;I edn:107-124
2 Stricker T, Navratil F, Sennhauser FH. Vulvovaginitis in prepubertal girls.
Arch Dis Child 2003; 88:324-326
3. Chanchlani, Hodes. Fifteen minute consultation: vulval soreness in prepubertal girls. Arch Dis Child Educ Pract ed 2021:106:333-340

6. Key Words

Vulvovaginitis, vaginal discharge, vulval irritation

The Trust recognises the diversity of the local community it serves. Our aim therefore is to provide a safe environment free from discrimination and treat all individuals fairly with dignity and appropriately according to their needs.
As part of its development, this policy and its impact on equality have been reviewed and no detriment was identified.

CONTACT AND REVIEW DETAILS	
Guideline Lead (Name and Title) Dr S Shenoy - Consultant	**Executive Lead** Chief Nurse
Details of Changes made during review: **January 2022** Links to patient information leaflets updated V4.1 January 2021 Removed reference to antibiotics, replaced with swab for MC&S if indicated	