Vaginal Discharge

Definition / Supporting Information

Vaginal discharge may be:

- Physiological
  - For example, in perinatal period following rapid decrease of maternal hormone levels
- Pathological

Vaginal discharge may be associated with sexual activity, which needs to be ascertained sensitively, noting that concern about confidentiality is the biggest deterrent to young people asking for sexual health advice. A chaperone may need to be considered; however, their presence can deter young people from being frank and from asking for help (see 0-18 years: guidance for all doctors [GMC guidance]).

Essential History

Ask about:

In pre-pubertal girls

- Hygiene
  - Wiping from the anus toward the vagina brings intestinal flora to the vaginal introitus
  - Use of chemicals can irritate the vulva and vagina. Examples include:
    - Bubble baths
    - Deodorants
    - Strong laundry detergents
  - Recent or concomitant illness
    - *Streptococcus pyogenes* (*S. pyogenes*) infection with or without scarlet fever, or
    - *Shigella flexneri* infection, with or after an episode of diarrhoea
    - Systemic illnesses, such as varicella
    - Rectal infestations with *Enterobius vermicularis* (*E. vermicularis;* threadworms)
      - Can lead to vaginitis if the eggs are deposited around or in the vagina
    - Recent history of antibiotic use
    - Diabetes

- Social history
  - Sexual abuse should be considered (see When to suspect child maltreatment [NICE clinical guideline CG89])

In pubertal and post-pubertal adolescents

- Sexual activity
  - Sexual abuse should be considered
  - Identify high risk individuals and provide structured discussions about reducing sexually transmitted illness risk-taking behaviours.
    - See Sexually transmitted infections and under 18s conceptions [NICE guideline PH3]
- Presence of a foreign body (eg, a retained tampon or condom)
- Use of spermicides or douching
- Dermatological conditions

'Red Flag' Symptoms and Signs

Ask about:

- Sexual activity

Look for:

- Any of the following in the genital area are suggestive of sexual abuse:
  - Bleeding
  - Bruises
  - Lacerations
  - Abrasions
- Abdominal mass

Differential Diagnosis / Conditions

Pre-pubertal girls

- Non-specific vaginitis (most common cause)
- Irritative agents (eg, bubble baths, sand); the vulva is often involved as well
  - Non-absorbent occlusive clothing (nylon undergarments, tights, bathing suits) also irritate the vulva, leading to skin breakdown and infection
- Poor perineal hygiene
- Foreign body
- Associated systemic illness (group A *Streptococci*, or *Varicella* infection)
- Bacterial infections
  - Enteric flora
  - *Shigella*

  - *Yersinia*
- *E. vermicularis* (pinworm, threadworm)
- Sexually transmitted infections (strong presumption of sexual abuse in pre-pubertal girls)
  - *Neisseria gonorrhoeae* (*N. gonorrhoeae*)
  - *Trichomonas vaginalis* (*T. vaginalis*)
  - *Chlamydia trachomatis* (*C. trachomatis*)
- Primary vulval skin disease
- Tumour (rare)
- Polyps (rare)

Pubertal girls

- *Candida albicans*
- *T. vaginalis*
- Bacterial vaginosis
- Herpes virus (occasionally associated with vaginal discharge)

Investigations

To be undertaken by non-specialist practitioners (eg, General Practitioner (GP) Team) or specialist practitioners (eg, Paediatric / Adolescent Gynaecology Team(s)):

- Skin swab for bacterial culture
- Urine dipstick for glucose (diabetes mellitus), leucocytes and nitrites and / or microscopy and culture (urinary tract infection)
- If indicated, vaginal swab for culture for *N. gonorrhoeae* and *C. trachomatis*
- Cellophane tape with its sticky side applied to the perianal area and then onto a glass slide may reveal the typical eggs of *E. vermicularis*

To be undertaken by specialist practitioners (eg, Paediatric / Adolescent Gynaecology Team(s)):

- Pelvic sonography if:
  - The patient has a pelvic mass on abdominal or bimanual examination

Treatment Approach

Pre-pubertal girls

To be undertaken by non-specialist practitioners (eg, General Practitioner (GP) Team) or specialist practitioners (eg, Emergency Department / Paediatric Team(s)):

- In the newborn
  - No treatment is needed
  - Discharge usually resolves by 10 days of age

- Non-specific vaginitis
  - Usually responds to thorough perineal hygiene
  - Advise patients to:
    - Avoid nylon tights and tight pants
    - Avoid sitting for long periods in nylon bathing suits
    - Wipe only from front to back
    - Avoid bubble baths
- Treat threadworm infestations with:
  - Mebendazole
- If discharge is associated with another infection (such as *S. pyogenes* or *Shigella* organisms), treat the underlying infection
- For persistent cases of non-specific vaginitis, treat in standard childhood doses for 10–14 days with one of the following antibiotics:
  - Metronidazole
  - Clindamycin
  - If treatment unsuccessful, then antibiotic or oestrogen creams may be used
    - Mupirocin
    - Metronidazole
    - Clindamycin
- If the organism causing the vaginal discharge is found to be sexually transmitted, more comprehensive evaluation and treatment are required
  - Cases should be discussed with the child protection team as appropriate

Pubertal and post-pubertal adolescents

To be undertaken by non-specialist practitioners (eg, GP Team) or specialist practitioners (eg, Paediatric / Adolescent Gynaecology Team(s)):

- For suspected sexually transmitted infections, liaise with genito-urinary medicine (GUM) specialists
- Vulvovaginal candidiasis (*Candida albicans*)
  - Topical therapy for 7–14 days **or**
  - Oral fluconazole
  - If more intensive treatment is warranted
    - Oral Fluconazole, 150 mg (post-puberty) one dose every 3 days for three doses followed by once weekly for 6 months
  - A variety of month-long antifungal treatments have been successful
  - Male sexual partners should be treated if they have any signs or symptoms of penile candidal involvement

- *T. vaginalis*
  - Metronidazole
    - The patient should be told to avoid alcohol until 24 hours after completion of therapy
  - Sexual partners must be treated
- Bacterial vaginosis
  - Metronidazole, orally **or**
  - Metronidazole gel 0.75% one full applicator (5 g) intravaginally once daily for 5 days (unlicensed in children) **or**
  - Clindamycin cream 2%, one full applicator (5 g) intravaginally every night at bedtime for 7 days (unlicensed in children)

When to Refer

Refer to specialist practitioners (eg, Paediatric / Adolescent Gynaecology Team(s)) if:

- There is a suspicion of sexual abuse
  - Refer urgently to child protection team
- The clinician is uncomfortable with evaluating genital symptoms in pre-pubertal girls
- Pelvic examination is required in pre-pubertal or peri-pubertal females
- Discharge persists despite seemingly appropriate therapy

'Safety Netting' Advice

Advise parents or carers to seek medical advice if the symptoms do not improve with treatment.

Patient / Carer Information

Please note: whilst these resources have been developed to a high standard they may not be specific to children.

- Vaginal discharge (Web page), the NHS website
- Vaginal discharge and vaginal bleeding (Web page), Patient

Resources

National Clinical Guidance

When to suspect child maltreatment (Web page), NICE clinical guideline CG89, National Institute for Health and Care Excellence.

Prevention of sexually transmitted infections and under 18 conceptions (Web page), NICE clinical guideline PH3, National Institute for Health and Care Excellence.

Medical Decision Support

Child Sexual Abuse (Web page), RCPCH Child Protection Companion

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