# Vulval disease in children

## Part 2: management and sexual abuse issues

**Most conditions of the vulva in children can be successfully managed in general practice. However, some of the rashes, particularly those causing erosions or ulcers, may raise suspicions of sexual abuse, and further advice should be sought on these.**

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Most cases of vulval itching in prepubertal girls are due to dermatitis, either atopic or the result of irritation from clothing or applied substances. There is often a much greater emotional overlay attached to conditions of the genital area than to skin conditions in other parts of the body, and the degree of distress experienced by the parents, and sometimes the child, may be out of proportion to the actual problem. There is still a tendency for vulval disease to be poorly understood in the community, and it is not uncommon for parents to take their child to many doctors before receiving what they consider a satisfactory explanation and effective treatment. As a result parents are often angry and frustrated. This can make history taking difficult, and leave the doctor wondering why the emotional reaction is so intense when there is so little to see.

The first part of this article, published in last month's issue of *Medicine Today*, discussed the various presentations of vulval disease in children. This, the second part, will consider diagnosis and management, and also sexual abuse issues.

### Diagnosing the problem

Where examination reveals little more than a dermatitic poorly defined rash, it is likely that the child does have dermatitis (Figure 1). Avoid pronouncing the examination as normal when there are significant symptoms. Signs can be subtle, so a careful close look is essential. It is appropriate to take a vulval swab to rule out superinfection, but urine culture is not necessary unless there are symptoms of frequency or dysuria (although these symptoms can sometimes result from dermatitic irritation of the opening of the urethra).

When the rash is erythematous but well defined, and particularly when there is perianal involvement, other signs of psoriasis should be looked for (Figure 2) and a family history asked about. A white, well defined eruption suggests lichen sclerosus.

If pustules or weeping areas are present, always perform a skin swab. If herpes simplex is suspected, viral swabs for PCR or culture are indicated. For a vaginal discharge, use a swab moistened with saline to gently sample from the introitus. Vaginal swabs

**IN SUMMARY**

- **If dermatitis is resistant to treatment with environmental modification and 1% hydrocortisone cream, consider noncompliance, infection and psoriasis.**
- **In Australia, virtually all cases of acute infective vulvitis are due to *Streptococcus pyogenes* and first line treatment is penicillin, not antifungal cream.**
- **Many rashes, particularly unusual ones such as lichen sclerosus and others that may cause erosions or ulcers, are often misdiagnosed as sexual abuse. If in doubt, refer to a dermatologist.**
- **Many parents of children with vulval disease are worried about the possibility of sexual abuse but few will raise the issue unless prompted.**
- **Sexually abused children usually have no physical signs.**

are not necessary, and cause distress to the child and parent. A skin scraping is indicated where a dermatitic rash has been persistent despite treatment. (See Part 1 of this article, published last month, for more on the differential diagnosis of acute infective vulvovaginitis.)

## Management of specific conditions

Most children with vulval disease can be managed effectively in general practice.

### Dermatitis

It is important for parents of children with any form of dermatitis to realise their child has a chronic problem that may require ongoing daily treatment.

#### Changing the environment

The first step in treating dermatitis is to modify the environment. It is preferable for young girls to bath rather than shower. No soap or bubble bath should be used; a soap substitute, bland moisturising cream or bath oil may be used instead. If the child does shower, the parent needs to explain that the labia have to be parted and rinsed, and this should be supervised. Shampoo should be rinsed out after the child gets out of the bath, or soap substitute used instead.

Children taking part in gymnastics, ballet or any other physical activity that involves wearing tight lycra clothing should wear loose cotton clothes, at least during practice sessions. Wearing such clothes will probably not be possible for performances and competitions, but explain to the parents that some compromises have to be made. Even nylon tights worn as part of a school uniform may have to be discarded, and the parents may need a doctor's letter for the school.

Chlorinated water can be a powerful irritant for children involved in swimming lessons or squad training. Vaseline or zinc cream applied to the vulva before swimming is helpful, as is always rinsing under the shower, with the costume off, before going home.

Incontinence problems, either enuresis or constipation with overflow, need to be dealt with. Night nappies should be discarded if possible. Ask about incontinence: parents often do not volunteer information about this as they it find embarrassing and do not necessarily connect it with the vulval irritation.

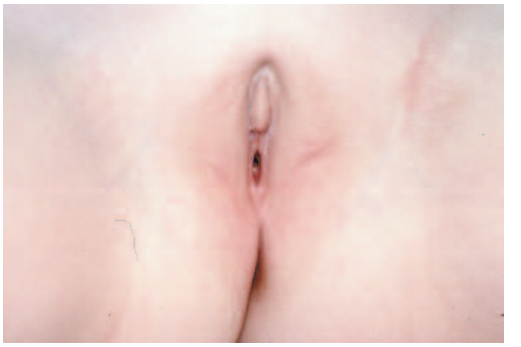

Figure 1. Vulval dermatitis. The signs of erythema and slight rugosity are subtle.

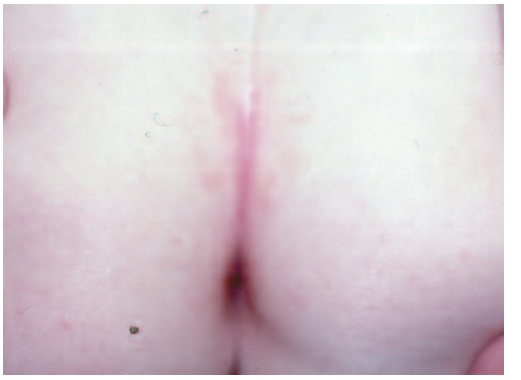

Figure 2. Psoriasis. Natal cleft involvement is a helpful sign.

Ask about use of over-the-counter topical applications. An amazing range of household products may have been used by the time the patient sees a doctor, not to mention easily obtained over-the-counter medications. Again this information may not be volunteered because the parents see these products as unsuccessful treatments, not potential problems. Ask about perfumed products, such as toilet paper and wet wipes, as well. Recommend that use of all these products be stopped, including medications such as topical imidazoles.

With regard to clothing, loose cotton underwear is ideal, and underpants should be avoided at night, particularly those made of nylon. Cotton nightdresses are the preferred nightwear.

The patient handout on page 55 lists the points described above.

#### Specific treatment

Most cases of vulval dermatitis will respond to 1% hydrocortisone (Cortef, Dermaid Cream, Dermaid Soft Cream, Sigmacort) as long as environmental changes are also made. Ointment formulations are preferable to creams, which may cause stinging because of the preservatives they contain. If the dermatitis is severe, a stronger nonfluorinated top-

ical corticosteroid such as methylprednisolone aceponate 0.1% (Advantan) or desonide 0.05% (Desowen) may be used for a week or two. The topical corticosteroid preparations Elocon (containing 0.1% mometasone, a very strong corticosteroid that is not appropriate in children) and Egocort Cream 1% (containing 1% hydrocortisone) both seem to have a particular tendency to sting on the vulva. It should be possible to reduce to 1% hydrocortisone when the rash has settled. If this is not possible, consider an alternative diagnosis.

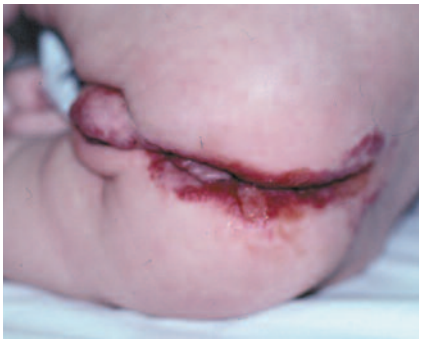

Figure 3. Ulcerated extensive haemangioma.

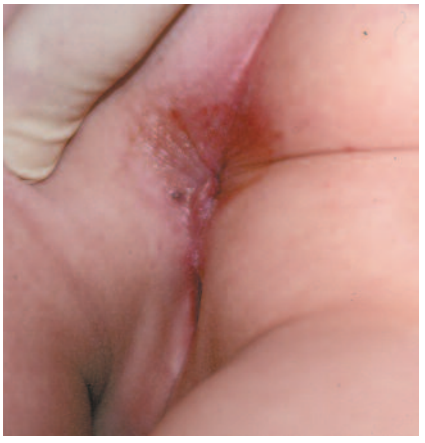

Figure 4. Perianal melanocytic naevus.

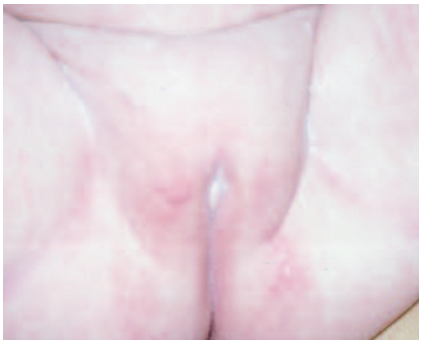

Figure 5. Epidermal naevus. Lesions like this are easily mistaken for warts or lichenification.

Many parents are apprehensive about using topical corticosteroids on their children's skin, even more so on the vulva, because of concerns that the preparations will 'thin the skin'. In practice, the above treatment is very safe and it is wise to preempt any parental objections with strong reassurance and a warning that chemists, naturopaths and well-meaning relatives may recommend caution regarding the use of these drugs.

## Psoriasis

Psoriasis tends to be more difficult to treat than dermatitis. Although some cases do respond to 1% hydrocortisone, it is not uncommon for psoriasis to require stronger corticosteroids, and sometimes tar creams. Referral to a dermatologist is recommended.

## Lichen sclerosus

There is an association (about 2 to 6%) between lichen sclerosus and squamous cell carcinoma of the vulva in adult life, and this carcinoma has been reported in relatively young women who have had lichen sclerosus since childhood. The condition should, therefore, be actively managed, and referral to a dermatologist is recommended.

Treatment requires prolonged use of potent topical corticosteroids, and follow up should be lifelong.

## Haemangiomas

Haemangiomas on the vulva usually resolve spontaneously. Treatment is usually only required if ulceration occurs (Figure 3), and involves the use of ulcer dressings and, possibly, oral prednisone (Panafcort, Sone).

## Pigmented naevi

Pigmented naevi of the vulva and perianal area do not have a significant malignant potential. If they appear benign (that is, they are symmetrical, have an even colour and are not enlarging) then observation is all that is required (Figure 4). Referral to a dermatologist is necessary if there are signs of malignancy.

## Epidermal naevi

Epidermal naevi do not have a potential for malignancy and are therefore best left alone if they are not causing problems because of their itchiness or size (Figure 5). Partial or complete excision may be needed to relieve recalcitrant itching or for warty perianal lesions.

## Vulvovaginal infections

If skin, introital or perianal swabs show infection, a course of appropriate antibiotics should be given.

A finding of group A β-haemolytic streptococci requires a 10-day course of penicillin or amoxycillin, or cephalexin (or erythromycin) in children allergic to penicillin. The course must run for the full 10 days or recurrence may occur.

A finding of staphylococci, usually *Staphylococcus aureus*, requires a course of antistaphylococcal antibiotics such as cephalexin or flucloxacillin (Flopen Oral, Floxapen, Staphylex). Impetigo usually responds quickly, but folliculitis can be very persistent and is often better treated with topical agents, such as bath products containing chlorhexidine (Hexol) or triclosan (QV Flare Up Bath Oil, Hamilton Medicated Skin Wash, Oilatum Plus), and mupirocin 2% cream (Bactroban). Underwear should be hot washed, and every attempt made to discard night nappies. If there is underlying dermatitis, this should be treated.

## Pinworm infestation

With possible pinworm infestation, check that the child has been treated with mebendazole (Combantrin-1 with

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Mebendazole, Vermox) by her parents. If she has not, then begin a trial of treatment.

### Molluscum contagiosum

In most cases, it is not necessary to treat vulval molluscum contagiosum. Although extraction of the viral core from the centre of the lesion may be tolerated on less sensitive parts of the skin it is usually not when the lesion is on the vulva. Spontaneous resolution invariably occurs.

### Genital warts

Genital warts are usually self-limiting, but can occasionally become large enough to interfere with toilet routines and may then need treatment. Although there are no data on the use of agents such as podophyllotoxin or imiquimod in children, they are probably preferable as first line treatment to painful modalities such as cryotherapy or cautery, which require a general anaesthetic.

### Fusion of the labia

Fusion of the labia tends to resolve spontaneously but may require treatment in the meantime. It is the only condition where oestrogen cream is the treatment of choice in a prepubertal child. The cream need only be applied once a day, and the fusion usually resolves over a two- to six-week period. Once the fusion has separated, ongoing treatment with soap avoidance, topical lubricants and 1% hydrocortisone is recommended. The fusion may reform and have to be re-treated from time to time. This can be a problem as oestrogen creams are irritating in children, making co-operation difficult.

### Foreign bodies

Proven bacterial infection that recurs suggests a foreign body. The child should be referred for examination under anaesthesia and saline lavage. Often there is very little to be seen on lavage, and it is likely that only small fragments of foreign material cause this clinical presentation.

**MedicineToday** **PATIENT HANDOUT**

## Skin care in children with vulval disease

- Don't let your child use soap on her vulva. A soap substitute may be used instead.
- Don't let your child use bubble bath. It is best to remove bubble bath from your bathroom.
- Don't shampoo hair in the bath.
- Having a bath with a moisturising bath additive such as bath oil or bland moisturising cream is the best way to wash. If your child has a shower, make sure she understands how to wash her vulva and anal area. You may need to supervise.
- If your child is wearing nappies at night, this may be aggravating the problem. Can she do without them?
- Don't use perfumed wipes.
- Use hypoallergenic toilet paper, easily obtained from supermarkets.
- Don't use antifungal creams or other over-the-counter medications, and avoid perfumed moisturisers on the vulva. Sorbolene cream may sting. Only use what your doctor has recommended.
- Your child should wear only cotton underwear, and don't let her wear it at night. Nightdresses are better than pyjamas.
- Does your child do ballet, gymnastics or similar sports that require her to wear close fitting nylon or lycra tights or clothes? These are likely to irritate her skin in the vulval and anal areas. Although these may be compulsory for competitions or other performances, can she wear loose cotton clothes for practice sessions?
- Are nylon tights part of your child's school uniform in winter? Will the school let her wear long socks? If needed, your doctor can give you a certificate.
- Does your child take part in swimming lessons or training in a chlorinated pool? Get her to apply some vaseline or zinc cream to her vulva before each session, and to shower afterwards. Don't let her go home in her wet swimming costume.
- Does your child have trouble with any form of incontinence, either urine or faeces? This is likely to be part of the problem. Ask your doctor what you should do.

## Psychological management

Much stronger reassurance is often required when skin conditions affect the vulva than when they are found on other parts of the body. It is best to have a matter of fact manner and help the parents to understand that the vulva is simply part of the skin and, as such, is likely to be affected by skin conditions. However, always ask about fears of sexually transmitted disease and child abuse.

Make sure parents are aware that children rapidly pick up their anxieties, and that an intelligent child may capitalise on this with attention-seeking or school-avoiding behaviour. Nonintervention, reassurance and not giving in to attention-seeking behaviour are the best treatments for these behaviours, although psychiatric help may occasionally be required.

## When to refer

If the diagnosis is uncertain or there is no apparent response to treatment, consider referral. In practice, lack of a response is often a result of noncompliance, in turn the result of anxiety about the condition. Extra reassurance from another doctor may be required.

Referral is appropriate in cases of proven infection that has recurred. There may be an underlying abnormality that is causing the recurrence, such as a foreign body.

An ulcerating lesion may raise concerns of sexual abuse. Most ulcers, however, are

not traumatic but pathological. If there is doubt about whether the problem is a skin condition or a sign of trauma, refer the child to a dermatologist for an opinion before taking any action.

If there is concern about child sexual abuse, particularly if there is doubt (which is often the case), referral to a paediatrician or child protection unit should be considered. Referral is also appropriate in cases of fusion of the labia if there has been no response after a four-week trial of oestrogen cream.

## Child sexual abuse and vulval disease

Most parents of a child with a vulval condition of any sort will have considered the possibility of sexual abuse, even though they often do not tend to voice it, particularly at the first visit to the GP. It is reasonable for them to act this way.

Child sexual abuse and paedophilia receive enormous publicity in the lay press. However, details of the evidence there might be in an abused child are never given, leaving this up to the imagination. Professionals who deal with children are very aware of child abuse as an issue because of legal requirements to reveal criminal records as a condition of employment. It is, therefore, common for carers and teachers to have concerns of sexual abuse in children who scratch the vulval area constantly or who complain of vulval pain. Their concern has to extend to the possibility that parents who suspect abuse in a child with a vulval condition may blame those who care for the child in their absence.

Doctors in most Australian States and Territories are required by law to report any suspected case of sexual abuse. A GP faced with a child with a vulval condition may have to consider sexual abuse if there is any doubt about the diagnosis. This presents them with a difficult problem: reporting the patient may well ruin the doctor–patient relationship, and may result in an unnecessary and distressing invasion of privacy if the suspicion proves incorrect.

Even in expert hands, diagnosing sexual abuse is very difficult, and it is impossible to prove abuse without a disclosure from the child or a relative. Even after investigation and interview in a child protection unit, many cases remain unresolved.

Most children who have been sexually abused do not have any physical signs because trauma such as bruises resolve quickly and the abuse usually does not involve attempts at penetration. The presence of a rash such as dermatitis, psoriasis or lichen sclerosus should not raise queries of abuse. The child may well have been abused, but the rash in itself is not evidence: there have

to be additional reasons to suspect abuse.

In cases where the child has an infection that may have been acquired sexually, such as genital warts or genital herpes, the issue of sexual abuse should be raised. If there is no obvious explanation of nonsexual transmission, there are grounds to report the case. Where there is doubt, referral to a child protection unit is the best first step; these units are mandatory reporters. If the child's parents refuse to let the child be assessed or even attend her appointment, it leaves the GP with no option but to report the case themselves.

When a child presents with a vulval rash, it is so common for parents to have unvoiced concerns about sexual abuse that it is worthwhile raising the subject with them. They will usually be greatly relieved to find that their child simply has a skin problem. The medical literature contains many cases where skin conditions have been mistaken for sexual abuse, including lichen sclerosus and ulcerated haemangiomas, and rarer skin conditions such as bullous pemphigoid, which may cause genital ulcers.

It is important to understand that people may attribute almost any vulval condition to sexual abuse. In addition to a vulval condition, there have to be other grounds – based on household composition, parental concerns and the presence of sexually acquired infections and behavioural abnormalities in the child – to suspect abuse.

## Conclusion

The majority of children with vulval disease can be diagnosed on clinical appearance and history alone, and the only investigation needed is a skin swab for bacterial infection. Most of the conditions are dermatological rather than gynaecological, and they can be successfully managed in general practice.

Virtually any condition of the vulva may be attributed to sexual abuse by parents. Sexual abuse is an important issue and every attempt should be made to deal with it. However, incorrect diagnosis of abuse when the child simply has a skin condition causes much distress. Great care should be taken when considering a diagnosis of sexual abuse and many cases remain unresolved, even after referral to child protection units for investigation and interview. MT

## Further reading


1. Fischer GO. Vulval disease in pre-pubertal girls. Australas J Dermatol 2001; 42: 225-236.
2. Fischer G, Rogers M. Vulvar diseases in children: a clinical audit of 130 cases. Pediatr Dermatol 2000; 17: 1-6.
3. Pokorny SF. Prepubertal vulvovaginopathies. Obstet Gynecol Clin North Am 1992; 19: 39-58.