ANZ Vulvovaginal Society

Acute and chronic vulval dermatitis

What is dermatitis and what causes it?

Dermatitis is a reversible irritation of the skin. There are several potential sources of irritation. Dermatitis is curable if the source of irritation is removed, the inflammation is treated, and the barrier function of the skin is restored.

The first source of irritation relates to people whose skin feels dry and itchy so they scratch the skin. Chronic scratching causes the skin to feel even itchier, so there is a vicious cycle. This situation is called 'eczema' and can occur all over the body. People with this condition may also have seasonal allergies and asthma.

The second source of irritation relates to products in contact with the skin that will eventually cause dermatitis in anyone if used too much. This is called an irritant contact dermatitis. These products include soap, shampoo, toilet paper, pads, liners, clothing elastics, scrubbers, wipes, and alcohols. Hair removal with shaving, waxing, or depilatory creams also irritates the skin. Increased skin contact with urine, bowel motions, semen, friction, and sweat also may trigger dermatitis.

The third source of irritation is products that produce an allergic reaction – this is called allergic contact dermatitis. In this situation, the same product can cause a major reaction in one person and no problem in another person. Almost any product that touches the skin can cause an allergic reaction. Common sources of allergy include perfumes, dyes, preservatives, local anaesthetics, metals, and plant extracts. Many 'hygiene' and 'beauty' products at the chemist have long lists of ingredients containing many different chemicals that can cause allergy. Products that are 'organic' or 'natural' or 'plant-derived' can contain allergy-producing ingredients.

What is the difference between acute and chronic dermatitis?

Acute dermatitis is when skin first starts to react to the source of irritation. The main symptoms are itch and pain. There is a red or pink rash on the skin. Sometimes the rash is in a pattern that matches where the source of irritation was in contact with the skin. Other times the rash is more general. The skin can be swollen and have splits, blisters, and the top layer can peel off.

ANZ Vulvovaginal Society

Chronic dermatitis results when the initial problem is untreated and the person keeps scratching and rubbing the skin. Over time, the skin thickens and takes on a grey-pink colour with increased skin markings. There might be scratch marks or areas where the skin has been rubbed off. The injured skin itself becomes itchy, so the person scratches even more and this sets up a vicious cycle. Sometimes people scratch so much the skin bleeds.

Why is dermatitis common on the vulva?

There are several reasons dermatitis is common on the vulva and perianal area. The vulva is constantly exposed to heat, moisture, friction, sweat, urine, stool, blood, semen, and toilet paper. People tend to over-clean the vulva with frequent soapy showers and rub the area with scrubbers and towels – this dries out the skin and interferes with its natural barrier function. People put lots of different products on the vulval and perianal skin. When they start to feel itchy, they often buy another product and put that on. By the time they see someone about the problem, there may be 10 or more different things put on the skin. People also rub and scratch the vulval skin while asleep and do not realise they are doing it.

What tests are necessary to diagnose dermatitis?

Most cases of dermatitis can be diagnosed by having a chat about what things might be irritating the vulval skin, then doing an examination. The doctor or nurse may look all over the skin to see if there are any other rashes or signs of chronic scratching. They will examine the vulva and perianal area and may take a swab or scraping to look for bacteria or fungi that might contribute to the problem.

Biopsy is not routine if the person's situation and examination all point to dermatitis (see *Biopsy*). Biopsy is done if there is a concern for a chronic skin condition like psoriasis, lichen sclerosus, or lichen planus (see *Information sheets*). Another reason to do a biopsy is if people have not responded to standard treatments.

Acute dermatitis and chronic dermatitis look different to each other under the microscope. Acute dermatitis shows swelling in between the cells and inflammation, but the skin otherwise looks fairly normal. In chronic dermatitis the skin is thickened and shows mild fibrosis (a form of scar) under the skin due to injury from scratching.

ANZ Vulvovaginal Society

Other skin disorders have a similar microscopic appearance to both acute and chronic dermatitis. So, biopsy can support the diagnosis of dermatitis, but it cannot 'prove' it.

What is the treatment for dermatitis?

The most important part of treatment it to figure out what are the sources of irritation and to stop them. For most people, this is fairly easy. However, some people have issues that cannot be changed, like diapers for untreatable incontinence, being confined to a bed or wheelchair, or non-stop leaking of urine or stool from a stoma (bag) or a fistula (abnormal connection between one organ and another).

The next step is to restore the barrier function of the skin (*see Vulval care advice*). For most people this involves a major lifestyle change. They have to re-think the way they shower, clean themselves after using the toilet, manage periods and sex, and many other issues. They should start using a soothing barrier ointment or oil to restore the skin's moisture and provide a layer of protection between the skin and the outside world. Depending on the severity of the problem, this might be once daily or may be multiple times throughout the day.

Finally, many people need steroid ointments temporarily to calm the inflammation and heal the injured skin. For acute dermatitis, this might be a short course of mild to moderate steroids, although severe cases will need stronger treatment for longer. For chronic dermatitis, this usually means a reducing regimen of steroids over several months, often starting with a strong steroid daily and then tapering down to a moderate or mild steroid. In certain conditions and situations, a dermatologist will choose to use a different medication. In complex situations, like when the source of irritation cannot be removed, people may need ongoing care with a dermatologist or vulval specialist.