

View this article online at: patient.info/womens-health/vulval-problems-leaflet/lichen-sclerosus

Lichen sclerosus

Lichen sclerosus is an uncommon skin condition. It most commonly affects the genital skin (vulva) of women. It can occur at any age.

What is lichen sclerosus?

Lichen sclerosus (pronounced 'lie-ken scler-roe-suss') is a skin condition that mainly affects the genital skin (vulva) in women and the penis in men. It most commonly occurs in middle-aged women. Symptoms include itch, soreness and changes in the appearance of affected skin. Treatment with a steroid cream or ointment often eases the symptoms.



Mikael Häggström, CC0, via Wikimedia Commons

Causes of lichen sclerosis

The cause of lichen sclerosis is not known. In lichen sclerosis, inflammation of the affected skin changes the structure of the skin.

Lichen sclerosis is probably an autoimmune disease. An autoimmune condition is one where the body's immune system accidentally attacks your own body. This causes inflammation and damage to the affected part of the body.

In people with lichen sclerosis the genital area of skin may be attacked by some parts of the immune system which then causes inflammation. However, this has not been proved and it is not really known what triggers lichen sclerosis to develop.

About 1 in 4 people with lichen sclerosis have another autoimmune disease such as thyroid disease, [vitiligo](#), or pernicious anaemia. This is why it is thought that lichen sclerosis might be an autoimmune disease.

Symptoms of lichen sclerosis

Women and girls – vulval and anal area

Typically, small pearly white spots develop on the genital skin (vulva). The spots are usually itchy. However, in some people there is no itch or other discomfort and lichen sclerosis is sometimes diagnosed by chance when the genitals are examined by a doctor for another reason.

In about 3 in 10 cases, the skin around the back passage (anus) is also affected. Sometimes only the skin around the anus is affected. Typically, the itch and irritation become persistent and distressing. The itch tends to be worse at night which can disturb sleep.

Sometimes soreness rather than itch is the main symptom. Lichen sclerosis is a skin condition only and does not extend into the vagina or inside the anus. Over time, the white spots may become larger and join together.

The whole vulva and/or anal skin may then become white and be more fragile than normal. The fragile skin may become damaged, inflamed, raw and prone to painful splitting and cracking. It may become painful to have sex. If the anal skin is affected, passing poo (faeces) may cause pain.

If left untreated, over months or years the vulva may shrink (doctors call this 'atrophy'). In some cases the changes of the vulval skin may make the entrance to the vagina narrower. This can make it difficult or painful to have sex. Also, [thrush](#) and other infections tend to be more common if the vulva is sore or cracked.

Symptoms may slowly get worse but not all the above symptoms may occur. It can take months or years from the first small spots to progress to more severe symptoms. At first the symptoms may be mistaken for thrush or other problems: often women have tried lots of creams from the chemist before being examined and having lichen sclerosus diagnosed.

Men and boys – penis

White spots develop on the foreskin and end of the penis. These can be sore. In time, the changes to the affected skin may cause difficulty in retracting the foreskin and in passing urine. Erections may become painful. The anal skin is rarely affected in men.

Other areas of skin

Sometimes small patches of lichen sclerosus occur on other parts of the body. These look like small pearly white areas on the skin. Sometimes they occur in people who also have genital lichen sclerosus. Sometimes they occur without genital problems. Away from the genital area, patches of lichen sclerosus usually do not cause itch or other symptoms.

When to see a doctor

See a doctor if you think you might have lichen sclerosus.

They will examine the affected area. They may also refer you to a specialist (a dermatologist, gynaecologist or urologist with interest in genital skin problems) to confirm the diagnosis.

Risk factors

Although we don't know exactly what causes lichen sclerosus, several risk factors have been identified:

- Gender. Lichen sclerosus is more common in women than in men.
- Genetics. Lichen sclerosus seems to be more common in some families; it may be that some people inherit genes that make them more likely to develop lichen sclerosus after something else happens, such as an injury.
- Age and hormones. Lichen sclerosus most commonly develops in women after the menopause, and, less commonly, girls who have not yet gone through puberty. Hormones, such as oestrogen and progesterone, are low in pre-pubertal girls and post-menopausal women, and may be linked to the condition.

Are there any complications from lichen sclerosus?

The itch and discomfort may cause a lot of distress. If untreated, lichen sclerosus can cause scarring of the vulva, which can make it painful to pass urine. Scarring can make the vaginal opening narrower, which can make penetrative sex painful and sometimes impossible. There is also a small increased risk of developing [cancer of the vulva](#).

The exact risk is not known but it is thought that about 4 in 100 women with lichen sclerosus develop this cancer. In men there is a small increased risk of developing [cancer of the penis](#). Again, the exact risk is unknown but it is thought that around 8 in 100 men with lichen sclerosus develop this cancer.

Topical steroid treatment is effective at preventing scarring, and also seems to reduce the risk of cancer developing.

How is lichen sclerosus diagnosed?

The appearance is often fairly typical, in which case no further tests are needed. If the diagnosis is in doubt, a small sample ([biopsy](#)) of affected skin may be taken under local anaesthetic.

The sample of skin is put under a microscope to look at the structure of the skin cells and tissues. This can confirm the diagnosis and rule out other disorders which can sometimes copy (mimic) this condition.

If lichen sclerosis is diagnosed it is usual also to do a routine [blood test](#) to check for an [underactive thyroid gland](#). This is because of the association between lichen sclerosis and autoimmune diseases and, in particular, autoimmune thyroid disease. Up to 3 in 10 people with lichen sclerosis also have an underactive thyroid gland.

Lichen sclerosis treatment

Topical steroids

A strong steroid ointment or cream ([topical steroid](#)) is the main treatment ([clobetasol](#) or [mometasone](#)). Steroids reduce inflammation. It is usual to use the ointment or cream regularly for three months.

A common plan is to use a single application at night for four weeks, followed by alternate nights for four weeks and then twice a week for four weeks. You must use the steroid as directed by your doctor. Keep on with treatment for as long as advised.

Irritation tends to ease after two weeks or so, but the skin may take about three months of treatment to look and feel better.

The skin may return to normal if lichen sclerosis is diagnosed and treated with a topical steroid at an early stage. If the appearance of the skin has already changed a lot, the changes may not reverse much with topical steroid treatment even though symptoms of itch and soreness are often relieved.

After the initial regular treatment for about three months, you may then only need to use the ointment or cream once or twice every 1-2 weeks to keep symptoms away.

Some general measures

- Use a moisturising (emollient) cream or ointment instead of soap to clean the genital area.

- Avoid bubble baths, scented soap, detergents, perfumes, etc, to the genital skin (vulva) of women.
- These may irritate the skin and make symptoms worse.
- Lubricants are useful during sex if having sex is painful.

Other treatments that are sometimes used

- Other medicines. In the small number of cases where topical steroids do not help, a skin specialist may advise other medicines to reduce inflammation.
- A vaginal dilator may be advised if you have any narrowing of the vaginal opening. A vaginal dilator is a cylinder-shaped piece of plastic that you insert into the vagina to gently stretch the opening and the inside. You use it each day for a time as directed by your doctor.
- Surgery. An operation to widen the opening of the vagina is occasionally needed in women with severe lichen sclerosus which has caused narrowing of the vaginal entrance. (**But note:** regular use of a dilator as described above may prevent the need for surgery.)
- Foreskin removal ([circumcision](#)) may be needed in some affected men or boys.
- Some men may need other operations to improve the narrowing and scarring of the water pipe (urethra) caused by this condition.

Will lichen sclerosus go away?

There is no permanent cure for lichen sclerosus. However, treatment with a topical steroid usually controls the symptoms of itch and soreness, and often prevents the condition from getting worse. Occasionally the condition clears away for good for no apparent reason. This is more common in young girls when the condition often goes during puberty.

Can you prevent lichen sclerosus?

The exact cause of lichen sclerosus is unknown, and we don't know of any way to prevent it from developing.

Further reading

- [Fruchter R, Melnick L, Pomeranz MK](#); Lichenoid vulvar disease: A review. Int J Womens Dermatol. 2017 Mar 27;3(1):58–64. doi: 10.1016/j.ijwd.2017.02.017. eCollection 2017 Mar.
- [Lewis FM, Tatnall FM, Velangi SS, et al](#); British Association of Dermatologists guidelines for the management of lichen sclerosus, 2018. Br J Dermatol. 2018 Apr;178(4):839–853. doi: 10.1111/bjd.16241.
- [Kirtschig G](#); Lichen Sclerosus–Presentation, Diagnosis and Management. Dtsch Arztebl Int. 2016 May 13;113(19):337–43. doi: 10.3238/arztebl.2016.0337.
- [Krapf JM, Mitchell L, Holton MA, et al](#); Vulvar Lichen Sclerosus: Current Perspectives. Int J Womens Health. 2020 Jan 15;12:11–20. doi: 10.2147/IJWH.S191200. eCollection 2020.

Disclaimer: This article is for information only and should not be used for the diagnosis or treatment of medical conditions. Egton Medical Information Systems Limited has used all reasonable care in compiling the information but makes no warranty as to its accuracy. Consult a doctor or other healthcare professional for diagnosis and treatment of medical conditions. For details see our [conditions](#).

Authored by:	Peer Reviewed by: Dr Hayley Willacy, FRCGP	
Originally Published: 19/11/2023	Next review date: 13/07/2023	Document ID: doc_4536

View this article online at: patient.info/womens-health/vulval-problems-leaflet/lichen-sclerosus

Discuss Lichen sclerosus and find more trusted resources at [Patient](#).



To find out more visit www.patientaccess.com
or download the app



Follow us

