

# Vulvovaginal Disorders: An algorithm for basic adult diagnosis and treatment

## **LICHEN SCLEROSUS**

#### What is lichen sclerosus?

Lichen sclerosus (LS) is a benign (non-cancerous) skin disease that can occur in females of any age, even babies and young children. It mostly affects the vulva or outer lips and surrounding area of the vagina. In about 50% of cases, lichen sclerosus will also affect the skin around the rectum. Fewer than 20% of women affected have additional lesions on their necks, trunks, and arms or legs.

#### How common is LS?

Vulvar LS can occur at any age, but tends to have two peaks of onset: prepubertal girls and perimenopausal or postmenopausal women. It is one of the most common conditions treated in vulvar clinics. The true prevalence is not known; estimates range from 1 in 30 elderly women to 1 in 59 women in a general gynecology practice, to 1 in 300 to 1000 patients referred to dermatologists.

#### What causes lichen sclerosus?

The cause of lichen sclerosus is unknown, but many vulvar experts believe that it occurs as a woman's own immune system attacks the vulvar skin, (an auto-immune reaction). LS is NOT contagious and cannot be passed to a sexual partner or to another part of your body. With LS, the affected skin loses elastin, a substance that allows the skin to stretch. At the same time, the amount of fibrin, which causes tissue to thicken and be less elastic, increases. LS may be associated with other auto-immune conditions such as vitiligo (white patches on the skin) or thyroid disease. It also tends to run in families.

#### What are the symptoms?

Most women experience intense itching around the vulva and the vaginal opening. This can be easily confused with chronic yeast infections, but anti-fungal medications do not relieve symptoms. How badly a woman itches does not seem related to the extent of change in the skin in the affected area. For 10-15% of women, itching is not a complaint, and in a few women, a dull, painful, discomfort signals the onset of lichen sclerosus. Some women do not have any symptoms at all.

Skin affected by lichen sclerosus appears wrinkled, thin, and white (similar in appearance to tissue paper). Affected areas often appear in a butterfly or keyhole shape. If the anal area is involved, there can be a "figure of eight" shape to the whitened skin. Because the tissue becomes thin and fragile, constant scratching can cause bruising or sores.

Women who have untreated lichen sclerosus for an extended period of time may find that the labia minora, the smaller lips around the vagina, begin to shrink and disappear. Thickened skin may begin to cover the clitoris, which may interfere with sexual function and enjoyment.



## How is lichen sclerosus diagnosed?

Because many conditions of the vulva look similar to the naked eye, clinicians use biopsy to confirm the diagnosis and determine the right treatment. Your clinician can perform a biopsy easily in the examination room, using local anesthesia. She removes a small piece of skin (half the size of the end of a pencil eraser). The sample is sent to a pathologist for microscopic analysis and diagnosis. In some cases, the diagnosis is obvious to the experienced clinician and no biopsy is needed to confirm it.

Discomfort following biopsy is minor and can be relieved with sitz baths (soaking the area in warm, shallow water) and acetaminophen (Tylenol®, Panadol®). Vulvar tissue heals quickly.

It is important to keep the area clean and dry to prevent the biopsy site from becoming infected. A clean squeeze bottle filled with warm water works well to clean the vulva after urinating.

#### What is the treatment for lichen sclerosus?

Lichen sclerosus is a chronic skin disease. There is no cure for it, but treatment can greatly improve the condition, control it, and prevent further damage to the skin. In most cases, this is an ongoing process. In the past, clinicians recommended testosterone (a hormone) cream because it can thicken the skin and improve the shape of skin structures. This is now rarely used. More recently, a strong cortisone ointment, clobetasol proprionate 0.05% (or another steroid ointment in the same class, halobetasol proprionate 0.05%), has proven helpful in treating lichen sclerosus.

Initially applied once or twice a day for a specified amount of time, clobetasol helps relieve itching and soreness. Clinicians gradually switch patients over to a milder cortisone ointment, or a reduced dosage, after severe symptoms go away. Side effects of clobetasol include skin irritation and secondary fungal, bacterial, or viral infections. Women must apply the ointment carefully to get the maximum benefit and avoid side effects. Many women find it helpful to look with a mirror the first few times they use the ointment. This helps them be sure they cover the entire affected area with a thin coat. When applied correctly, a woman should not be able to see or feel the medication. Applying the ointment to slightly damp skin after bathing makes the application easier and absorption better.

A clinician must carefully monitor the use of clobetasol. Excessive or prolonged use can cause thinning of the skin and skin inflammation. While medication can help control lichen sclerosus, the condition may recur when the medication is stopped. For some women, lichen sclerosus disappears during pregnancy, only to recur after childbirth. In children, this condition may resolve permanently with the onset of puberty.

#### What should I watch out for?

Most women find that their symptoms improve dramatically with treatment, in which case itching disappears. If itching persists in causing scratching, the condition may be harder to heal. An anti-histamine taken orally at night (hydroxyzine 10-25 mg at bedtime) may decrease itching while the steroid is being used to heal the skin.



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About 3-4% of patients with LS may develop a type of skin cancer in the affected areas, although early treatment may reduce this risk even further. Any new lumps or non-healing sores, or a major change in your symptoms should be reported to your clinician.

We advise patients with LS to have a genital examination at least once a year.

Keeping follow-up appointments is an important part of treatment. Together with your health care team, you can manage lichen sclerosus.