



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

## LICHEN PLANUS

### What is lichen planus?

Lichen planus (LP) is a disease of the skin caused by inflammation. It may appear in several different ways:

- It can appear on the skin (cutaneous LP) as a rash of small purplish bumps, often on the arms, legs or back). In some cases, the nails and the scalp are also involved.
- On rare occasions, the skin may have thickened and/or whitened areas (hypertrophic LP). These may have a warty appearance.
- It can affect the mouth (oral LP) with a whitish eruption or with raw areas.
- It can affect the genital area, including both the vulva and the vagina.

In women, it occurs most commonly at the age of 50-60 years, though both younger and older women can be affected. It is possible to have the disease in one area without ever having a problem elsewhere, but many patients with vulvar LP have LP in the mouth, as well, (vulvovaginal-gingival LP).

### How common is it?

Oral LP is more common (1 in 100) than vulvar or vaginal LP (1 in 4000). About 50% of women who have oral lichen planus may have vulvar or vaginal LP, but the diagnosis may be missed as dentists do not generally inquire about genital symptoms. Likewise, the mouth may not be routinely examined by the clinician who sees a woman complaining of vulvovaginal symptoms.

### What causes LP?

The cause of LP is unknown but many experts believe that it occurs as a woman's own immune system attacks the vulvar skin, (an auto-immune reaction) and causes severe inflammation. In some cases, it is possible that an infection or medication can start this reaction. We do not know why the lesions develop in some places and not others. LP may be associated with other auto-immune conditions such as vitiligo (white patches on the skin), thyroid disease, and alopecia areata (patches of hair loss).

Lichen planus is NOT contagious and cannot be passed to a sexual partner or to another part of your body.

### What are the symptoms and what do I see?

- Soreness, burning, and rawness are the most common symptoms. Less commonly, there may be itching. If the outer layers of the skin break down (erosions), these areas appear moist and red, and are very tender.
- There may be a white, lacy pattern on some parts of the vulva. This pattern can also be seen around the edges of the erosions
- The vulva may appear pale white or pink/red. Scarring, with flattening of the inner lips (labia minora) may be seen. There may be scarring in the clitoral area. There may be shiny, red, raw areas (erosions).



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

- If the inflammation involves the vagina, erosions can occur inside in a patchy or generalized pattern.
- Some women have a sticky, yellow or yellow-green discharge, which can be blood-stained, especially after intercourse. Scarring around the vaginal entrance may make it tight and painful, and the vagina may become shorter in length and width. These are reasons why intercourse can be painful or even impossible. Sometimes it is difficult for a doctor to perform an internal examination.
- If the skin is affected in other parts of the body, the rash is usually on the inside of the wrist, the forearms and the ankles. The spots are a purplish color and you may see some fine white streaks on the top of the spots. A similar white, lacy streaking may be seen inside the mouth, but there may not be any symptoms. There may be sore, red, ulcerated areas around the gum margins, tongue, and inside of cheeks.

### How is LP diagnosed?

Clinicians familiar with the condition may diagnose it by looking at the skin and seeing the characteristic appearance. The diagnosis can be confirmed by taking a biopsy: a small piece of skin which is sent to the laboratory and then looked at under a microscope. This simple procedure can be done in the doctor's office. The skin is numbed with an anesthetic cream, then more anesthetic may be injected under the skin to be biopsied. 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.

Biopsy does not always confirm what the clinician thinks the problem might be. A biopsy showing no problem (negative biopsy) does not mean that the disease is not there. Clinicians have to be guided by their best judgments in many cases. Often we need to treat for lichen planus even if we cannot prove it is there by biopsy.

There are many treatments used to treat lichen planus. Treatments aim to slow down the increased activity of the immune system attacking the skin.

Treatment needs to be selected to fit your problem. Different people respond to different things. Treatment is a long process and close follow up with your care-giver is important.

First, education is needed. It is important to learn about lichen planus by reading any educational materials provided. Take care with the Internet; there is often focus on severe cases without early diagnosis and treatment.

Then, gentle care. All irritating products must be stopped. Avoid using soap, perfumed products, over the counter creams, douches, wet wipes, or tight clothing in the area. Then "Soak and Seal". Warm water soaks, followed by patting dry gently, and application of medication to seal in the moisture, will help with its absorption.

There is no cure for LP, but it can be managed (with significant reduction in symptoms) with medication. (In some cases, LP seems to come and go of its own accord and it is possible that it will disappear completely on its own, but most women need to use topical medications to feel better and halt progression.)



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

Finally, treatment for LP includes a strong topical steroid such as clobetasol 0.05% or halobetasol 0.05%. The ointment form (petrolatum-like) is generally used rather than the cream (white, like thick, plain yogurt) because it goes through the skin layers better and because the creams contain alcohols and preservatives that can irritate the skin. Strong steroids are safe to use if the clinician's instructions are followed. A 30 gram tube will often last more than a year because only a tiny dab is necessary. The ointment is applied once or twice a day for about a month (depending on the severity of the condition) and then on alternate days, then approximately twice weekly for maintenance.

Occasionally, non-steroid ointments designed to help other types of severe inflammation in the skin are used. These non-steroid ointments are called calcineurin inhibitors (tacrolimus, pimecrolimus), often helpful when used with steroids, or on their own.

If the vagina is involved, then a vaginal preparation containing cortisone can be inserted into the vagina. For scarring and narrowing of the vagina and/or the entrance into the vagina, physical therapy to the pelvic floor and/or dilators may be advised. Rarely, surgery is needed.

If the ointments do not control the inflammation, then prednisone tablets can be taken orally. Steroid injections into persistent erosions or intramuscular steroid (Kenalog) injections may be used.

When topical medication is not helping well enough, potent oral anti-inflammatory medications such as methotrexate or cyclosporine, which lower the overactive immune system, may be needed. These are medications that require blood tests to monitor their side-effects; this will all be discussed with you if you require them.

Women on topical steroids can have a safe pregnancy. However, it is very important that a woman does not become pregnant if taking tacrolimus, pimecrolimus, methotrexate, or cyclosporin, discussed above, as they can be harmful to the baby.

### **What should I watch for?**

As LP is a long lasting, inflammatory skin condition, there is a very slight increased risk of developing local types of skin cancer in the area compared to women without LP. The risk is about 3%. Any new, raised, bleeding, or non-healing spots in your genital area should be reported to your healthcare provider. It is important that your LP be monitored and that you attend follow-up visits with your healthcare provider at least once per year.