

LICHEN PLANUS OF THE NAIL UNIT

What are the aims of this leaflet?

This leaflet has been written to help you understand more about the lichen planus of the nail unit. It tells you what it is, what causes it and what can be done about it.

What is the lichen planus of the nail unit?

Lichen planus is an inflammatory, very itchy, fairly common condition (0.2-1%) that affects adults between the ages of 40-60 and is rare in children. It is non-contagious and the sites which get involved are the skin, hair, mouth, genital skin and the nail unit. The nail unit is the whole structure of the outer part of the digit that involves the nail, the nail bed, the skin around it and the nail matrix (area where the nail is formed).

What causes lichen planus of the nail unit?

The cause of lichen planus is unclear, possibly due to overreaction in the skin's immune system, however, medications, viruses and contact allergens have all been implicated. One in four patients with skin lichen planus have got nail involvement. Although sole presentation of the nails can occur, it is less common. Twenty nail dystrophy (involvement of all 20 nails) is a picture more commonly seen in children.

What does lichen planus of the nail unit look like?

Depending on the location of the insult on the nail unit, the picture of the nails change.

If the disease is concentrated on the matrix of the nail (the site of nail production) then the nails become thin, rough and ridged. The thumbs are usually the most frequently affected. When there is nail matrix destruction the nails split and the skin moves over the nail causing a wing-shaped appearance (pterygium), quite an infrequent presentation, that is not related to disease duration. This type of nail lichen planus can cause thinning and scarring, therefore the patient needs oral steroids promptly to stop any further damage, which would be irreversible.

When the disease is concentrated on the nail bed, the nails appear thick and get detached from the bed.

All twenty nails may be affected and appear like sandpaper. This presentation is benign and usually self-limiting and commoner in children.

The nails may appear yellow and thick.

Another but very rare presentation is the appearance of blisters on the nails and on the surrounding skin. Blisters may also appear on other sites on the skin. The consequence of the blistering on the nails is scarring.

Children may also present with lichen planus of the nails, but less frequently than adults.

How is lichen planus of the nail unit diagnosed?

It is a clinical diagnosis. The presence of rough, thin nails, with splitting, ridging in lines, brown discolouration and the formation of a wing-shaped structure are all signs that indicate lichen planus. However, sometimes it is difficult to make the diagnosis and since long-term inflammation may cause irreversible nail changes (scarring), a diagnostic nail biopsy may be required.

How can lichen planus of the nail unit be treated?

Your dermatologist will advise you about the best treatment for you.

Not all types of nail lichen planus can be treated.

Those that can NOT be treated are:

1. The wing-shaped structure (pterygium) formation
2. The sand-paper appearance of all 20 nails needs no treatment as it is usually self-limiting

3. The previously blistered nails that have now scarred

In all the other forms the following treatments can be tried:

1. Topical high potency corticosteroids, topical tacrolimus
2. Injections of steroids on the diseased nails, if only a few are affected (3-4)
3. Intramuscular injections of steroids every month for at least 6 months
4. Oral treatment: steroids, retinoids (acitretin , alitretinoin), ciclosporin, azathioprine
5. Biologic therapy: Etanercept

Nail lesions can last for many years.

Self care (What can I do?)

Avoid any nail manipulation i.e nail biting, nail manicure, as the disease has a predisposition for the sites of trauma caused by the manipulation (Koebner's response). The nails need to be kept short in order to minimise any injury.

Where can I get more information?

Web: <https://dermnetnz.org/topics/lichen-planus/>

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