# Lichen Planus

Dr. Sahni BS	Website: http://www.homoeopathyclinic.com
DHMS Hons, PGRT (BOM), FF Hom,	Email: <u>drsahnibs@vsnl.com</u>
Deputy Chief Medical Officer (H)	
ONGC Hospital Panvel-410221	
Navi Mumbai, India	

#### Introduction

LP is worldwide in distribution with no racial predisposition although there is a considerable variation in its incidence. In temporate climates the disease has been recorded in infants, but it is rare in childhood and most cases seen are in the 30-60 age group. In the tropics and subtropics a younger age group is also affected. Women are affected more often than men, although an opposite ratio or equal sex incidence has been found.

LP is characterized by shiny, flat papules. The papules retain the skin lines and are described as polygonal. Individual papules vary in size from pinpoint to a centimeter or more across and may be closely aggregated or widely dispersed. Although the size of the papule is often fairly uniform in each patient, this is not necessarily so, and minute and large papules are intermingled in some cases. On the surface there may often be seen white lines, known as <u>Wickham's striae</u> (**Pic.1**). The overall color is also often characteristic, and is described as violaceous. This is most obvious in older lesions, especially when they became hypertrophic. Papules may remain discrete or appear in groups, in lines or in circles.



Picture 1

Linear lesions often appear along scratch marks or in scars (Kobner's phenomenon) (**Pic.2**), whilst annular lesions may be formed either by groups of papules arranged in rings or by single, large papules clearing in the center and leaving an active margin.



Annular lesions are especially common on the penis (**Pic.3**).



Picture 3

Whilst the majority of papules are flat, groups of 'spiny' lesions are not uncommon, and these develop around hair follicles (lichen plano-pilaris) (**Pic.4**). A horny spine very like keratosis pilaris then tops the papules. This type of lesion may occasionally predominate, but more often forms only a minor feature of the disease.

Picture 2



Picture 4

In most cases the papules flatten after a few months, but are often replaced by an area of pigmentation that remains the shape of the papule and persists for months or years. There may be gradual change in color from pink to blue to black. Sometimes, especially in colored races, the residual pigmentation is intense, but in some fair-skinned Caucasians it is almost imperceptible. New papules may form whilst others are clearing. Some papules persist much longer and tend to enlarge and thicken, and the surface becomes rough to the touch. These are the hypertrophic lesions and in them the violaceous hue is more prominent. When hypertrophic lesions eventually dear, some atrophy or scarring may often be noted. More warty lesions are seen occasionally. Areas of pigment loss have been described in black South Africans. They are uncommon and may be difficult to diagnose.

LP can affect any part of the body surface, but there are a few areas where it is most likely to appear; these are on the front of the wrists (Pic.5), the lumbar region and around the ankles. The ankles and shins are the commonest sites for hypertrophic lesions. When the palms and soles are affected, the lesions tend to be firm and rough and have a yellowish hue (Pic.6). Lesions here may be broadly sheeted or may show up as punctate keratoses. Very rarely, ulcerative lesions are encountered on the soles of the feet.



Vesicles and bullae in LP are uncommon, decidedly but very occasionally predominate and lead to great difficulty in diagnosis. Linear or zosteriform lesions are usually made

up of small papules in dose apposition, sometimes becoming confluent. They are seldom more than a few centimeters in length but isolated, long, linear lesions are found occasionally and may extend the whole length of a limb; this type of lesion is more often seen in children. Such cases may overlap with epidermal naevi and the term lichenoid epidermal naevus has been introduced.

Picture 6

Mucous-membrane lesions are very common, occurring in 30-70% of cases; they are also not uncommonly found without evidence of skin lesions. The buccal mucosa and tongue are most often involved, but lesions may be found around the anus, on the genitalia; in the larynx and very rarely on the tympanic membrane of the ears or even in the oesophagus. White streaks, often forming a lacework, on the buccal mucosa is highly characteristic (Pic.7). They may be seen on the inner surface of the cheeks, on the gum margins or on the lips.



Picture 7



Picture 5

On the tongue the lesions are usually in the form of fixed, white plaques often slightly depressed below the surrounding normal mucous membrane; they are more common on the upper surface and edges than the underside (**Pic.8**). Ulcerative lesions in the mouth are uncommon, but are more important because they may be the sites of epitheliomatous transformation (**Pic.9**).



Picture 8



Picture 9

Diabetes has been noted to be a possible associated disease of

oral LP. Candidiasis may coexist with LP in some patients.

Itching is a fairly consistent feature in LP, but is occasionally completely absent. When present it ranges from occasionally mild irritation to more-or-less continuous, severe itching, which interferes with sleep

and makes life almost intolerable. Hypertrophic lesions usually itch severely. Paradoxically, even when itching is severe, one seldom finds evidence of scratching, as the patient rubs, rather than scratches, to gain relief. Itching at sites without visible skin lesions can occur. Burning and stinging are less common complaints. In the mouth the patient may complain of discomfort, stinging or pain; ulcerated lesions are especially painful. Hot foods and drinks may cause great discomfort.

#### Complications

Hair fall is uncommon in LP, but when it occurs, is usually permanent. There seems little doubt that it is the result of the inflammatory infiltrate extending deeply around the follicle, ultimately destroying it by a scarring process. This most often occurs in small areas on the scalp and produces patches of atrophic cicatricial alopecia (**Pic.10**). Actual papules of LP are seldom seen in the scalp but the appearance of typical LP on other parts of the body associated with patches of atrophic cicatricial alopecia developing on the scalp leaves little room for doubt that it has been caused by the disease.

The atrophic cicatricial patches may continue to appear or to extend for months after the skin lesions have faded. The final result is one of pseudopelade; this is probably best considered as a clinical entity due to a number of independent conditions, one of which is due to LP.

The nails are involved in up to 10% of cases, but this is usually a minor feature of the disease. The most common change is a slight thinning of the nail plate, which may be observed to emerge from beneath the cuticle and extend forward with the growth of the nail,



Picture 10



Picture 11

giving rise to an exaggeration of the longitudinal lines and to linear depressions on the nail plate (**Pic.11**). These changes most often occur in association with severe generalized

LP, but there are not necessarily any skin lesions near the nail. Occasionally, an adhesion forms between the epidermis of the dorsal nail fold and the nail bed, causing partial destruction of the nail (pterygium unguis) (Pic.12). Less severe damage may show as an elevated ridge on the nail. Rarely the nail is completely shed; there may be partial re-growth or it may be permanently lost (Pic.13). The nails of the great toes are the ones most often affected in this way, and there is usually clinical evidence of LP at the base of the nail before it is shed. LP has been shown to cause childhood idiopathic atrophy of the nails. The rare variety of LP, which causes ulceration of the soles, is often accompanied by permanent destruction of several toenails. The minor nail changes are temporary, but those involving destruction of the matrix are permanent. These nail changes are all similar to those seen in association with impaired peripheral circulation, but in fact are due to LP in the nail matrix. They may rarely



Picture 12



Picture 13

occur without evidence of LP elsewhere. LP of the nail bed may give rise to longitudinal melanonychia, hyperpigmentation, subungual hyperkeratosis or onycholysis. The so-called 'twenty nail dystrophy' appears to be unrelated to LP.

Epitheliomas developing on mouth lesions are uncommon, but are a definite potential danger, especially with ulcerated lesions. These may occur on the lip, the buccal mucosa, or the gum margin. The incidence in reported series varies greatly, from under 1% to 10%.

## VARIANTS

#### Hypertrophic lichen planus

This usually develops during the course of a sub-acute attack, but occasionally only hypertrophic or warty lesions are found. They most often occur on the lower limbs, especially around the ankles; venous stasis has been put forward as an explanation (**Pic.14**). The development of hypertrophic lesions greatly lengthens the course of the disease, as they may persist for many years. When such lesions eventually clear, an area of pigmentation and scarring may remain and there is often some degree of atrophy. They must be distinguished from lichen simplex chronicus and lichen amyloidosus (papular).



Picture 14

## Follicular Lichen planus

Syn. Lichen Planopilaris

Although it is more common for follicular lesions to appear during the course of typical LP, they occasionally predominate and diagnosis may then be difficult. Follicular lesions occurring in the scalp are accompanied by some scaling and are likely to lead to a scarring alopecia. Very rarely the scalp alone is involved. Follicular LP must be distinguished by biopsy from keratosis pilaris, Darier's disease, follicular mucinosis, and lichen scrofulosorum and, in the scalp, from lupus erythematosus.

#### Linear ficheu planus

Linear lesions as a Kobner effect are frequently found in LP but isolated, long, narrow linear lesions, which may extend the whole length of the limb, are rare, though rather more common in childhood. A zonal or zosteriform lesion on the chest wall has been described (**Pic.15**). The histology is characteristic of LP and distinguishes it from other linear dermatoses such as lichen striatus, linear naevi and linear psoriasis.



Picture 15

## Actinic Lichen planus

Syn. Lichen Planus Subtropicus

'Actinic' or (sub) tropical LP has been the subject of much confusion. Virtually all of these cases originate from the Middle East, East Africa or India. The lesions occur on the exposed skin (usually the face) and are characterized by well-defined nummular patches which have a deeply hyper pigmented center surrounded by a striking hypo pigmented zone (**Pic.16**). Cases of actinic LP mimicking melasma have been reported. The histology of actinic LP has recently been well studied and reviewed by Verhagen and Koten. The lesions in Fact show a histological spectrum ranging from some almost indistinguishable to idiopathic LP; an intermediate form (lichenoid melanodermatitis) where foci of spongiosis and



Picture 16

parakeratosis accompanied the lichenoid features; and last, a type when the histology is much more overtly eczematous. Common to all these subtypes is striking pigmentary incontinence. It therefore seems likely that some of these 'hybrids' of actinic LP cannot be ascribed as mere variants of LP

## Annular Lichen Planus

Although small annular lesions are common during the course of LP, it is rather unusual to find cases showing a few large annular lesions only. When these occur they may be widely scattered and usually have a very narrow rim of activity and a depressed, slightly atrophic, center. Much less often the margin is wide, so that the central area is quite small.

In males, annular lesions are rather characteristically found on the penis (See Pic.3 above). Occasionally, there may be only annular lesions on the penis, sometimes associated with lesions on the buccal mucosa.

There is no other condition, which exactly simulates annular LP, but rarely granuloma annulare has to be excluded.

#### Atrophic lichen planus

In this form the lesions tend to be few in number. The atrophy may be the result of faded annular lesions or resolved hypertrophic lesions. In the latter, the lower legs are the most likely sites. Diagnosis depends on the history and on finding residual active lesions or signs of mucous-membrane involvement. In the atrophic stage the histology is likely to be non-specific, but allows lichen sclerosus or guttate morphoea to be excluded.

#### Guttate lichen planus

This term may be reserved for two clinical types in which lesions are widely scattered and remain discrete. The lesions may all be small, 1-2 mm across, or larger, up to 1 cm (**Pic.17**). These forms have a relatively good prognosis and individual lesions seldom become chronic. Early in an attack guttate psoriasis may be suspected, but the diagnosis becomes obvious quite quickly and can easily be resolved by the histo pathological findings.



Picture 17

#### Acute and subacute lichen planus with confluence of lesions

These may be considered together, because individual lesions all tend to be small. They are widely distributed and in the subacute form tend to become confluent, so that some areas closely resemble eczema. It is in these forms that color changes are most marked; the lesions are red at first and progress to black as they fade. Evolution of individual lesions is rapid, but with successive crops the total time for clearance may be little different from other forms, although a small minority clear in less than 3 months. In the earliest phase pityriasis rosea may be simulated, later eczema, but a careful search at the edge of the confluent patches will always reveal small but typical LP papules. Drug induced lichenoid eruptions can often resemble these appearances.

#### Lichen planus of the palms and soles

Lesions of LP on the palms and soles lack the characteristic shape and color of lesions elsewhere. They are papular or nodular and are more often situated near the margin than in the center. They are firm to the touch and are yellow in hue (See Pic.6 above). Less often there is more widespread thickening resembling tylosis. Itching may be absent. Although lesions on the front of the wrists occur in more than 50% of cases of LP, lesions on the adjacent palms are quite uncommon. It is not difficult to make a diagnosis when they accompany more typical lesions elsewhere, but when there is no other evidence of the disease, diagnosis is very difficult. Conditions, which have to be considered, are syphilis, psoriasis, callosities and warts.

There is a rare, very chronic form of LP in which ulceration develops on the sole of one or both feet. The ulcers are large, painful and very difficult to heal. The condition may lead to secondary webbing of the toes. The onset is insidious and there may be no other evidence of LP, although cicatricial alopecia has been associated in some cases. Before the ulcers appear the sole may be thickened and may resemble lichenified dermatitis or psoriasis rather than LP. After a time the toenails are gradually lost, first from the great toe and later from the others; the loss is permanent.

#### Lichen planus principally involving mucous membranes

Lesions confined to the mouth, or with minimal accompanying skin involvement, are not uncommon, and account for about 15% of all cases. The lesions differ in no way from those found in connection with skin lesions, but, being confined to the mouth, may lead to great difficulty in diagnosis. They are often referred first to a dental or general surgeon. On the tongue and buccal mucosa they are most likely to be mistaken for leucoplakia and on the gum margin for gingivitis or chronic candidiasis or the latter may coexist. Other conditions which must be excluded are 'smoker's patches', which characteristically involve the palate, and white sponge naevi in which the mucous membrane is thickened and irregularly folded and feels soft to the touch. These occur mainly on the floor of the mouth and histologically many of the prickle cells are vacuolated. Very occasionally LP lesions extend to the larynx or oesophagus. Oesophageal LP may result in dysphagia and the formation of benign strictures. A recent endoscopic study revealed that one-quarter of people with LP had oesophageal disease. Although treatment is of little help, the patient should be observed from time to time, as the chance of epithelioma developing is not negligible.

In young men the lesions are sometimes restricted to the genitalia and the mouth. The patient reports on account of the genital lesions, which are usually characteristic and may be present on the penile shaft, glans penis, prepuce or scrotum. Ulceration is very unlikely to occur and syphilis can usually be excluded without difficulty. When in doubt the presence of buccal mucosal lesions will usually confirm the diagnosis.

Lesions on the female genitalia are less common and when present are usually part of a more widespread eruption. They may, however, occur alone or be combined with lesions in the mouth, but not elsewhere. The clinical presentation of LP of the vulva spans a spectrum from subtle fine reticulate papules to severe erosive disease accompanied by scarring and loss of the normal vulvar architecture. The condition should be distinguished from lichen sclerosus or leucoplakia, but at times this may be difficult when there is coexisting atrophy or vaginal stenosis.

## Lichen planus pigmentosus

This is a pigmentary disorder seen in India or in the Middle East, which may or may not be associated with typical LP papules. The macular hyperpigmentation involves chiefly the face and upper limbs, although it can be more widespread. The mucous membranes, palms and sole are never involved.

## **Homoeopathy Treatment**

Lichen Planus; A nosode from Lichen Planus. It is very useful in the beginning of the case or given when indicated remedies fail to act.

**Sulphur:** It has an elective affinity for skin where it produces heat and burning with itching. < From warmth, scratching, washing & night. Most of the time used as a constitutional remedy.

Syphlinum: LP of nails. White or pockmark scars, Coppery spots

Ars Alb: Where eruptions are black, popular, dry, rough, scaly < cold & scratching.

Ars Iod: Indicated where marked exfoliation of skin in large scales.

Anacardium: LP with intense itching.

Juglan R: Specific for all types of LP.

Borax: LP of Tongue and buccal mucosa. Destruction of Nails due to LP.

Kali chloride: LP of Tongue and buccal mucosa.

Graphites: LP of nails.

**Sarsaparilla:** Copper colored eruptions. LP where skin is cracked especially on hands and feet. Skin scaly, hard indurate & shriveled < in spring.

Apart from above stated medicines some other Homoeopathic remedies like Kali Iod, Lycopodium, Hepar Sulph, Rhus Tox, Echinacea, Beryllium Met, Histaminum, Sarcolactcum Acid, Cortisone etc can be given if indicated.

## **References:**

1. Text Book of Dermatology By RH Champion, JL Burton & FJG Ebling.

2. Homoeopathic Remedy Guide By Robin Murphy.