

# **Lichen Planus**

Lichen planus is a dermatologic condition named for its resemblance to Lichen, an organism composed of fungus and algae. Causes are not well understood, and there is no cure. It is related to autoimmune processes in the body, and can be described by the 6 P's characteristics; pruritic, purple, polygonal, planar, papular and plaques.



**PLAY PICMONIC** 

## **Pathophysiology**

#### **Mucocutaneous Disorder**

Mucous-and-skin

Lichen planus is an autoimmune inflammatory disorder than can affect both the skin and mucosal surfaces. It is named for its resemblance to Lichen, an organism composed of fungus and algae.

# 30-60 year olds

(30) Dirty to (60) Minutes reporter

Lichen planus mainly affects middle- aged adults between 30 and 60 years old. Childhood cutaneous lichen planus is uncommon.

#### Signs & Symptoms

#### Pruritic

Prairie-dog

The classic presentation of cutaneous lichen planus is described by the four "P's": pruritic, purple, polygonal, and papules or plaques. The lesions seen in lichen planus are often extremely pruritic, or itchy.

# **Plaques or Papules**

Plaques and Papule-people

This rash can present as plaques, which are solid, raised, flat topped lesions that are larger than 1 cm in area. Plaques often form after the formation of papules the same as plaques except less than 1 cm in diameter.

## Purple & Polygonal

Purple Polygonal-polly

The lesions are often referred to as purple-colored "violaceous" lesions with a polygonal shape.

# Often Mucosal or Genital Involvement

Mucous on Genital-gentleman

Lichen planus can present with mucosal and genital involvement. Genital lichen planus usually presents as violaceous papules on the glans penis or the vulva.

## Wickham Striae

Wick-ham Stripes

Fine white lines, also known as Wickham's striae may be visible on the surfaces of the papules or plaques seen in lichen planus.

## **Diagnosis**



## **Biopsy**

Biopsy needle

Many cases of lichen planus can be diagnosed clinically. If the diagnosis is uncertain, a skin biopsy can provide a definitive diagnosis.

#### Sawtooth Infiltrate of Lymphocytes

Sawtooth bite from Lime-lymphocyte

On biopsy there is a "sawtooth" infiltrate of lymphocytes at the dermal-epidermal junction.

## **Treatment**

## **Topical Corticosteroids**

Topical Quarter-on-steroids

Lichen planus is usually self limited and topical corticosteroids are commonly used as first line treatment. Cutaneous lichen planus often spontaneously resolves after a few years, but lichen planus affecting the oral mucosa, genital mucosa, scalp and nails tends to be more chronic.

## Considerations

## **Hepatitis C Association**

Happy-tie liver (C) Cat

The association between hepatitis C virus (HCV) and lichen planus is controversial. Therefore, it has not been established if those with lichen planus need routine screening for HCV infection.