Lichen planus

Definition :

- Lichen planus is a chronic mucocutaneous disease that affects the skin, hair, genitalia, and oral mucosa.
- Its prevalence in the general population is less than 0.2-1 %.
- More than two thirds of lichen planus patients are aged 30-60 years; however, lichen planus can occur at any age

Pathophysiology

- Lichen planus is a cell-mediated immune response of unknown origin.
- Lichen planus may be found with other diseases of altered immunity; these conditions include ulcerative colitis, alopecia areata, vitiligo, dermatomyositis, morphea, lichen sclerosis, and myasthenia gravis.
- An association is noted between lichen planus and hepatitis C virus infection,
- chronic active hepatitis, and primary biliary cirrhosis.
- 16% of patients with lichen planus had hepatitis-C infection.
- Hepatitis should be considered in patients with widespread or unusual presentations of lichen planus.
- Onset or exacerbation of lichen planus has been linked to stressful events

Clinical Manifestation:

- The primary lesion is a flat (**P**lane), **P**urple, **P**ruritic, **P**olygonal **P**apule (**5 Ps** of lichen planus).
- The surface of the papule has reticulated white striae **(Wickham's striae)**; these are areas of focal epidermal thickening.
- The papules are found on the flexural aspect of the wrist, forearms, above the ankles and the lumbar region, they can be anywhere on the body or become generalized
- Some patients complain of intolerable pruritus.
- May be hypertrophic (especially pretibial), atrophic, or bullous.
- On the mucous membranes, the lesions appear as a whitish, lacy network. When mucous membrane involvement is severe, ulcerations may occur and there is an increased occurrence of squamous cell cancer.
- Postinflammatory hyperpigmentation is common after healing; this persists for many months to years especially in darker skinned patients**.**

- **In 10% of patients, nail findings** are present. Most commonly nail plate thinning causes longitudinal grooving and ridging. Rarely, the matrix can be permanently destroyed with prominent pterygium formation.
- **Actinic lichen planus:** occurs in regions, such as Africa, the Middle East, and India. This mildly pruritic eruption usually spares the nails, the scalp, the mucous membranes, and covered areas. Lesions are characterized by nummular patches with a hypopigmented zone surrounding a hyperpigmented center.
- **Follicular lichen planus:** Lichen planopilaris is characterized by keratotic papules that may coalesce into plaques. This condition is more common in women than in men, and nail and erosive mucosal involvement is more likely to be present. A scarring alopecia may result.
- **Genitalia** Papular, annular, or erosive lesions arise on penis (especially glans), scrotum, labia majora, labia minora, and vagina.
- Whatever the clinical presentation, histopathological analysis confirms the diagnosis of LP.

Course:

- In more than 50% of patients with cutaneous disease, the lesions resolve within 6 months, and 85% of cases subside within 18 months.
- On the other hand, oral lichen planus had been reported to have a mean duration of 5 years.
- Large, annular, hypertrophic lesions and mucous membrane involvement are more likely to become chronic.
- in general, the malignant transformation rate of oral lichen planus is low (< 2%).Vulvar lesions in women may also be associated with squamous cell carcinoma.

Differential Diagnoses

- Graft Versus Host Disease.
- Psoriasis, Guttate.
- Psoriasis, Plaque.
- Lichen Simplex Chronicus.
- Syphilis (secondary).
- Pityriasis Rosea.
- Tinea Corporis

Treatment

Local Therapy

- **Glucocorticoids** Topical glucocorticoids with occlusion for cutaneous lesions. Intralesional triamcinolone (3 mg/mL) is helpful for symptomatic cutaneous or oral mucosal lesions and lips.
- **Cyclosporine and Tacrolimus Solutions** Retention "mouthwash" for severely symptomatic oral LP.

Systemic Therapy

- **Glucocorticoids** Oral prednisone is effective for individuals with symptomatic pruritus, painful erosions, dysphagia, or cosmetic disfigurement,
- **Systemic Retinoids (Acitretin)** 1 mg/kg per day is helpful as adjunctive measure in severe (oral, hypertrophic) cases, but usually additional topical treatment is required.
- **PUVA Photochemotherapy** In individuals with generalized LP or cases resistant to topical therapy.
- **Cyclosporine** In very resistant and generalized cases, 5 mg/kg per day will induce rapid remission, quite often not followed by recurrence.
- **Other Treatments:** Mycophenolate mofetil, heparin analogues (enoxaparin) in low doses have antiproliferative and immunomodulatory properties; azathioprine**.**

Pityriasis Rosea

- Pityriasis rosea is a self-limiting disorder, predominantly affecting children and young adults.
- **Etiology:** There is good evidence that PR is associated with reactivation of HHV-6 or HHV-7, two closely related β-herpesviruses.
- **Season:** Spring and fall.

Clinical features:

- There may be a mild prodromal illness.
- One or more 'herald patches' appear. A herald patch is large, red, oval and scaly, and usually appears on the trunk or upper arm (often misdiagnosed, especially as ringworm!).
- A few days later, there is a sudden eruption of pink, oval patches on the trunk, upper arms and thighs.
- There are three especially notable features:

  1- On the trunk, lesions tend to lie with their long axes in lines sweeping from the back to the front (almost as if they were following spinal nerves). This is said to look like an 'inverted Christmas tree', but that depends on whether you are looking at the patient's back or front and on your concept of a Christmas tree! However, once understood, this sign will never be forgotten and no other disorder produces this.

  2 -The scale on the surface of each lesion exhibits a tendency to peel from the inside towards the edge, resulting in a so-called 'peripheral collarette'.

  3-If none of this has resulted in the diagnosis being made, it becomes clear when the rash disappears (as it always does) in 6-12 weeks.

Diagnostic approach:

- Almost exclusively a clinical diagnosis; KOH examination and syphilis serology are done if the diagnosis of P.R .is questionable.

Differential diagnosis

- Tinea Corporis
- Guttate psoriasis,
- Viral exanthems, nummular eczema,
- Secondary syphilis, and drug eruptions.

Course:

- Spontaneous remission in 6–12 weeks or less.
- Recurrences are uncommon.

Treatment:

- Symptomatic Oral antihistamines and/or topical antipruritic lotions for relief of pruritus.
- Topical Glucocorticoids.
- May be improved by UVB phototherapy or natural sunlight exposure if treatment is begun in the first week of eruption.
- Short course of systemic glucocorticoids.