



# Papulosquamous diseases

## Lichen planus and pityriasis Rosea

*Dr Awad Altarawneh*

*Presented By : Rama Abuqdaias , Jana  
Beshtawi , Shahd shamaseen , Raneem Al-  
qrara'a*



# Lichen planus

-Idiopathic inflammatory autoimmune disease of skin, nails, hair and mucous membrane in middle aged adults with characteristic clinical and histopathological features

- 0,2% - 1% of adults – incidence
- rare in children and elderly
- Mucosal involvement in 75% of patients
- Familial LP have been reported



## Pathogenesis

- Exogenous antigen, **virus** (HCV, transfusion transmitted virus-TTV, HHV-6), **vaccines** (HBV – vaccine), **bacteria** (Helicobacter pylori), **contact allergens** (allergy to metals like dental amalgam mercury), **drugs**, **autoantigens** (triggered by an underlying neoplasm)
- Lichen Planus is a T-cell mediated autoimmune disease in which the auto-cytotoxic CD8 + T cells trigger apoptosis of the basal cells of the skin and oral epithelium. T4-cells also play a role -Role for Fas \ Fas system and granule exocytosis (containing perforin and granzymes)--  
apoptosis

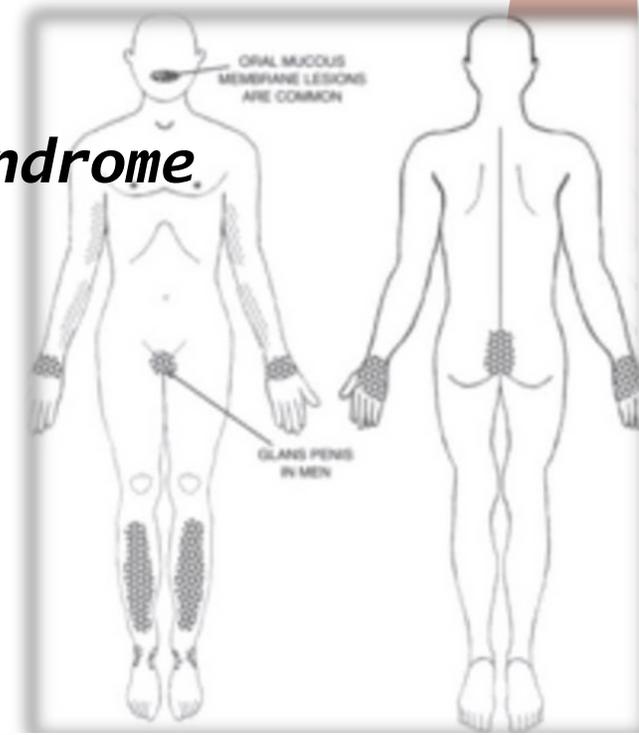
# Clinical features

- **small polygonal flat-topped violaceous papules , shiny surface**
- Wickham`s striae on the surface (fine white lines)
- Pruritic
- Koebner phenomenon
- No excoriation
- Site, flexural surface of wrist , forearm , ant.leg , neck , presacral area and glans penis .
- Duration depends on the variant of LP , exanthematous LP up to one yr. other variant like hypertrophic and mucosa - more



# Lichen Planus variant:

1. *actinic lichen planus*
2. *acute LP*
3. *anular LP*
4. *atrophic LP*
5. *bolus LP and pemphegoid LP*
6. *hypertrophic LP*
7. *Inverse LP*
8. *LP Pigmentosus*
9. *lichen plano-piliaris*
10. *linear LP*
11. *LP -lupus erythematosus (LE)overlap syndrome.*
12. *nail LP*
13. *Oral LP*
14. *ulcerative LP*
15. *vulvovaginal LP*
16. *Lichenoid drug eruption*



# 1-Actinic LP

- Common in middle East
- Onset during summer and spring
- Young adults and children
- Red– brown annular plaques on sun exposed areas
- Common site forehead and face
- actinic means sun radiation \*



Brown annular lesion with rim of hypopigmentation on the forehead and face

# 2- Acute LP

- exanthematous or eruptive LP
- Trunk , wrist , feet
- Rapidly disseminate
- Self-limited course within 3-9 months



\* Multiple eruptive widespread lesions .

### 3- Annular LP

- Annular scaly plaques with hyperpigmented center
- Axillae , penis
- Most patient asymptomatic , but some have pruritus



\*annular lesion with clear center and erythema at periphery .

### 4- Atrophic LP

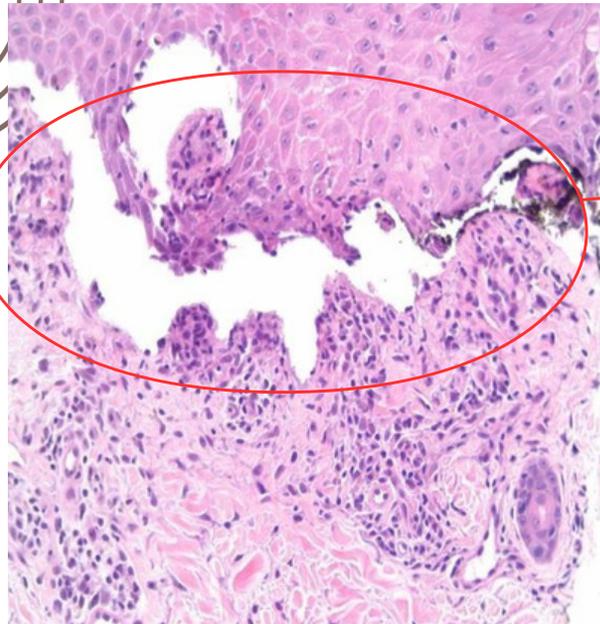
- May represent a resolving LP
- Lower extremities
- Differential diagnosis :
  - 1 lichen sclerosis et Atrophicans
  - 2 lichen sclerosis Morphea (because of atrophy )



Atrophic lesion on legs

# 5- Bullous LP and LP pemphigoides

- Bullous or vesiculobullous lesions develop within pre-existing LP lesions
- Some authors separate these two variants
- First (exaggerated Max. Josef space), second true sub epidermal blister due to circulating IgG autoantibodies



Exaggerated  
Max.josef space

presence of cleft between  
epithelium and basement  
membrane



Blister



## 6- Hypertrophic LP

- Verrucous LP
- Extremely pruritic
- Shins or dorsum of feet
- Symmetrical
- Duration prlonged
- **SCC can develop**



\* Verrucous , hypertrophic,thickened lesions

## 7- Inverse LP

- Lesions in intertriginous zones (axillae ,inguinal , inframammary folds )
- May present as hyperpigmentation or as violaceous papules



\* Need skin biopsy to make diagnosis

# 8-LP pigmentosus

- Brown to gray-brown macules on sun exposed areas
- Evolving into diffuse reticulate pigmentation
- **In type IV- III skin ( our skin types )**
- ~~Flexural involvement can occur~~
- Should be differentiated from erythema dyschromicum perstans (Ashy dermatosis)



Need biopsy

# 9- Linear LP

- Linear distribution of lesions within the **lines of Blaschko** pattern of lines on the skin that represent the developmental growth pattern during epidermal cell migration



Need biopsy

# 10- Lichen plano-pilaris (lichen planus acuminatus)

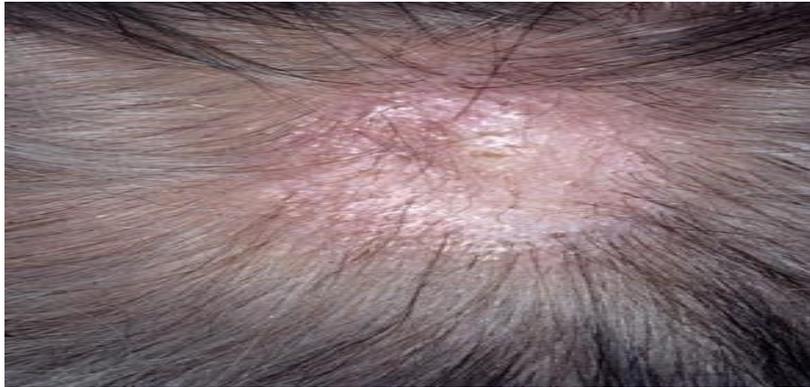
- Involvement of hair follicle
- Keratotic plugs surrounded by a narrow violaceous rim on the scalp or other hairy areas
- Scarring alopecia
- Women > Men
- A variant of lichen planopilaris is Graham Little–Piccardi syndrome (non-scarring) axillary and pubic hair loss + scalp scarring alopecia + typical lesions of LP



\* keratotic plugs around the hair follicle with a rim of erythema and scarring alopecia



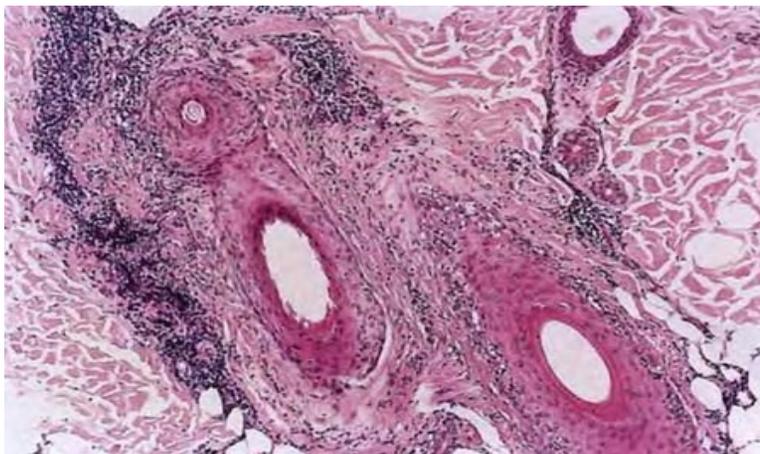
\* Keratotic plugs around the hair follicle with a rim of erythema



Lichen plano-pilaris with scarring alopecia.  
Dx is made by skin biopsy



\* Permanent alopecia and disfigurement



\* Inflammatory lymphocytic reaction involving hair follicle and destroying it

# 11- LP-Lupus Erythematosus(LE) overlapsyndrome

- Acral lesion
- Histological and IF features of both LP and LE

## 12-Ulcerative LP

- Palmoplantar lesions
- 30-40 yrs of age
- Painful ulcers
- **Risk for SCC**



Erosion on plantar surface of foot  
Dx. By skin biopsy

## 13- Nail LP

- Nailmatrix damage
- Affected in 10% of cases changes :
  - 1Lateral thinning
  - 2Longitudinal ridging
  - 3 Fissuring
  - 4Pterygium formation
  - 5Twenty nail dystrophy
  - 6 Onycholysis
  - 7Subungual hyperkeratosis



- 1 lateral thinning
- 2 longitudinal ridges
- 3 onycholysis
- 4 ptergium formation



- 1 longitudinal ridging
- 2 lateral thinning
- 3 ptergium formation

# 14-Oral LP

Different forms and can come in combinations

Atrophic – symptomatic

Bullous – symptomatic

Erosive – symptomatic

Papular – asymptomatic

Pigmented – asymptomatic

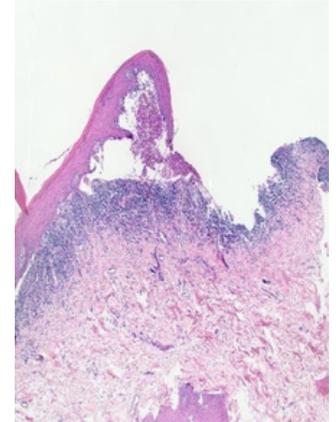
Plaque – like – among smokers

Reticular – the most common as lace – like pattern , asymptomatic , symmetrical

Uncommon in young patients

**Women > Men**

All mucous membranes should be examined



Reticular lesion with whitish line



Reticular and erosive form ( combined )



## 15-Vulvovaginal LP

- ~~Commonly erosive~~
- Differential diagnosis:  
lichen sclerosis  
blistering diseases

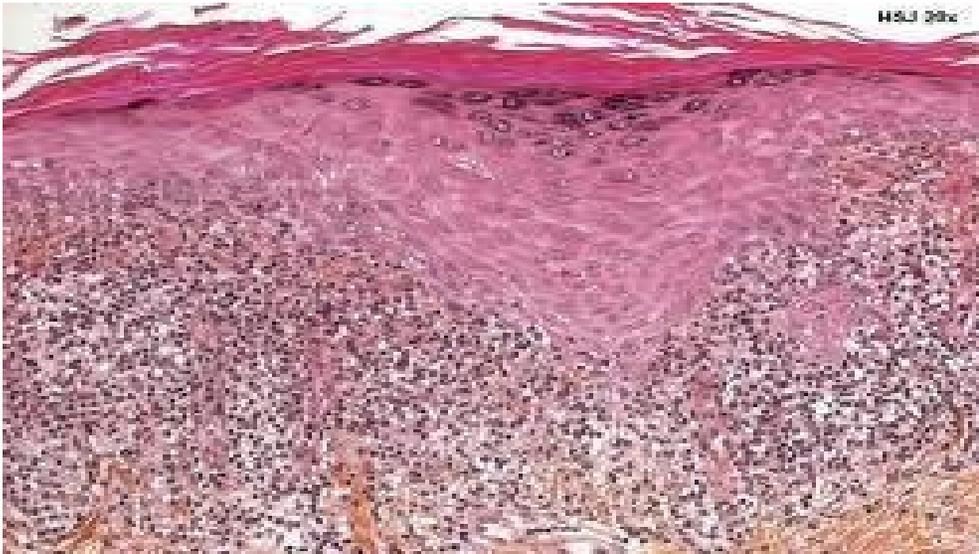
## 16- Lichenoid drug eruption

- Older age group
- More eczematous and psoriasiform lesions
- Uncommon Wickham`s striae
- Spared mucosal membranes
- Usually latent period of several months from intake to the appearance of rash
- Antibiotics , ACE , B-Blockers , NSAID , lipid lowering agents

# Lichenoid drug eruption



Lichenoid eczematous and psoriasisiform features



Histopathological changes in all types of lichen planus :  
hyperkeratosis  
hypergranulosis  
epidermal hyperplasia  
lichenoid inflammatory cells  
infiltrate





# Treatment: Topical, intralesional Systemic

## Topical treatment:

- Topical steroid
- Intralesional steroids
- Topical calcineurin inhibitors (tacrolimus 0,1%)
- NBUVB ( narrow band ultraviolet B therapy )

## Systemic treatment:

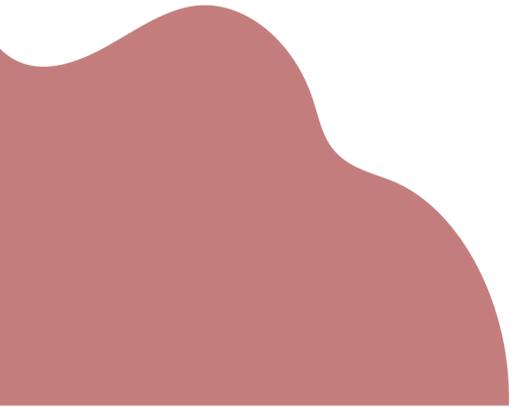
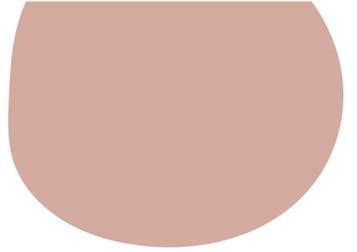
- 1 Steroids – low dose 15-20mg x 2-6wk, then taper
  - 2 Acitretin (Retinoids) 30mg 1day x 8wks
  - 3 Cyclosporine
- 

Variants	Site	Lesion	Notes
<b>Actinic</b>	fore head and face	Red – brown annular plaques on sun exposed areas	Young adults and children Common in middle East
<b>Acute</b>	Trunk , wrist , feet	- exanthematous or eruptive LP	Rapidly disseminate - Self-limited course within 3-9 months
<b>Annular</b>	Axillae , penis	Annular scaly plaques with hyperpigmented center	Most patient asymptomatic
<b>Atrophic</b>	Lower extremities	represent a resolving LP	Differential diagnosis : 1-lichen sclerosis et Atrophicans 2-lichen sclerosis Morphea SCC can develop
<b>Hypertrophic</b>	Shins or dorsum of feet	- Verrucous LP - Extremely	

Variants	Site	Lesion	Notes
<b>Inverse</b>	in intertriginous zones (axillae , inguinal , inframammary folds)	hyperpigmentation or as violaceous papules	
<b>LP Pigmentosus</b>	on sun exposed areas - Flexural involvement	Brown to gray- brown macules	In type IV- III skin
<b>Lichen planopiliaris</b>	Scalp or other hairy areas	- Keratotic plugs surrounded by a narrow violaceous rim	F>M Scarring alopecia Grahamlittle- piccardi syndrom
<b>Ulcerative</b>	Palmoplantar lesions	Painful ulcers	Risk for SCC
<b>Lichenoid drug eruption</b>	- Spared mucosal membranes	More eczematous and psoriasiform lesions - Uncommon Wikham`s striae	LAABN**



# Pityriasis Rosea



# Pityriasis Rosea

Relatively common acute, self-limited papulosquamous eruption mainly in healthy adolescent and young adults

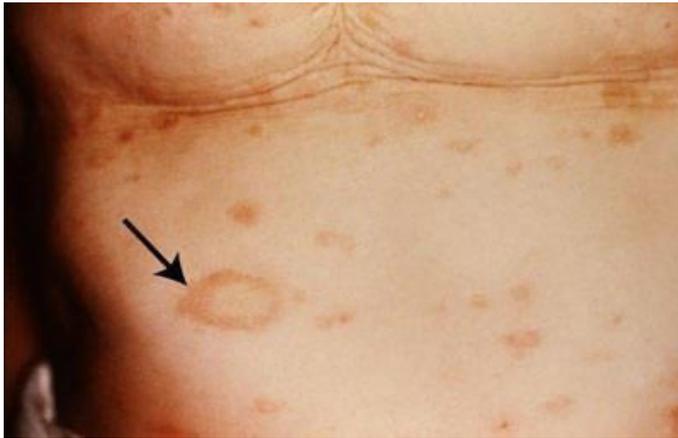
- Incidence: 0.5-1%
- 10-35 yrs old age
- F > M
- Duration 6-8 wks may be up to 5 months or more rarely
- Recently a role for HHV-7 was suggested but PCR studies failed to support this
  - Immunologic defense against an infectious agent

## Clinical features

- **Herald patch**, on trunk or neck, seen in 55% of cases
- Pink patch or plaque with raised advancing edge 1-4cm in diameter
- After 2-3 days numerous ascaly small oval plaques and papules (daughter patches) appear along the trunk and proximal extremities
- Collaret scale, free edge points inward
- Christmas tree distribution on the back



Herald patch is first lesion appears



Annular lesion with clear center and raised scaly margin ( herald patch )  
Which appears first followed by numerous scaly small oval plaque and papules



The scale is attached to the periphery of lesion and open toward center ( collaret scale )

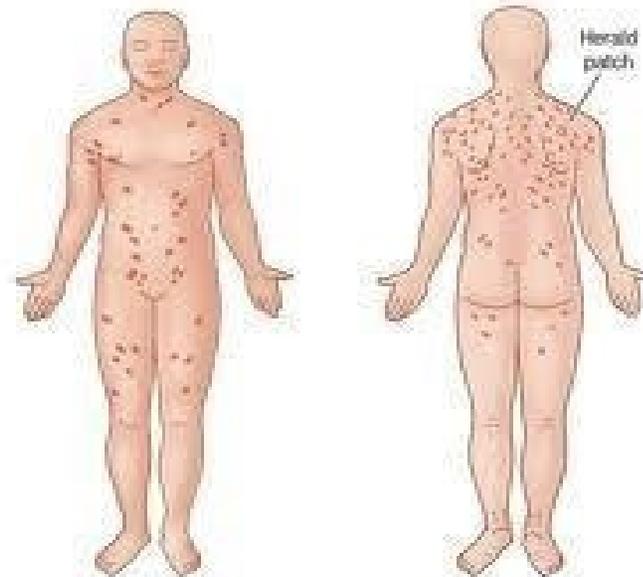
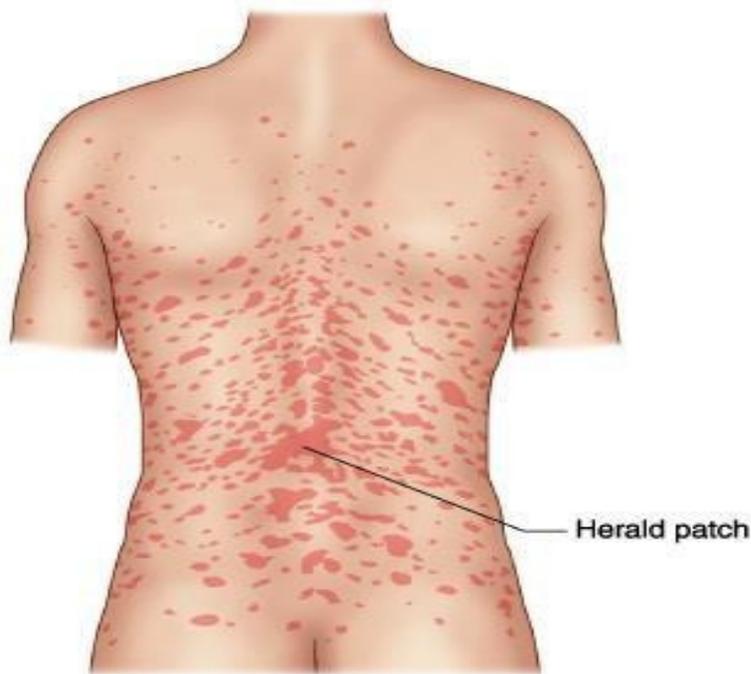


Collaret scales





**Oval parallel lesion with collaret scale on the trunk**

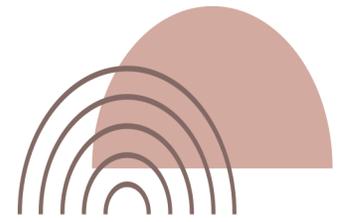


▲ FIGURE 41-4 Schematic diagram of the primary plaque (herald patch) and the typical dist secondary plaques along the lines of desquamation on the trunk in a Christmas-tree pattern.



## Christmas tree distribution on the trunk and proximal extremities





-If persists > 5 months :

PLC (pityriasislichenoides chronica )should be considered and skin biopsy should be performed

**-Atypical forms :**

1. Inverse (common in children)
2. urticarial
3. erythema multiforme – like
4. vesicular
5. pustular
6. pruritic

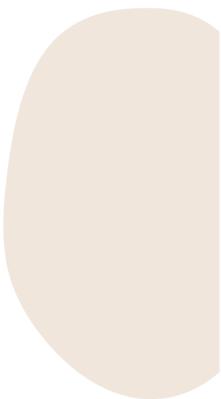
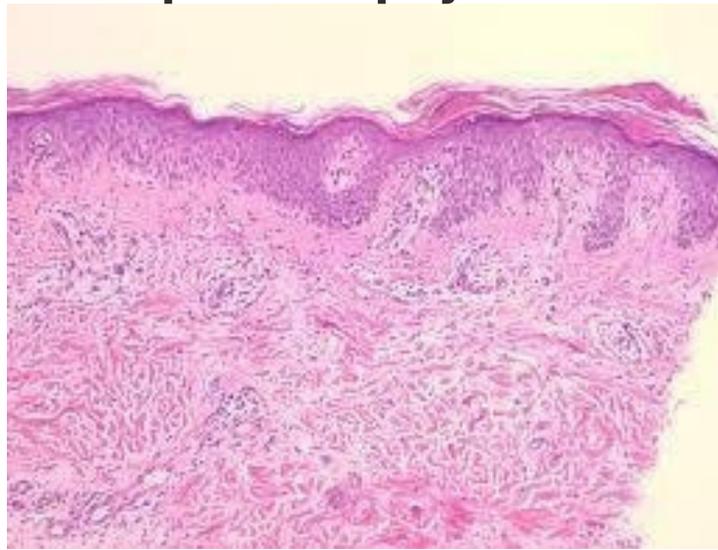


**Inverse form :**  
On flexural areas with collaret scales



unlike psoriasis + lichen planus which have characteristic histo

**The histological appearance of pityriasis rosea is non-specific but the biopsy is done to rule out other possible causes and to support clinical suspicion of pityriasis rosea**



# Differential diagnosis:

- Secondary syphilis (in young adults )
- Tinea corporis
- LP
- MF ( mycosis fungoides )
- Drug eruption
- Guttate psoriasis
- PLC ( pityriasis lichenoides chronica )

# Treatment :

- Reassurance
- Symptomatic
- Phototherapy – Narrow band – UVB
- erythromycin ( 500mg 5 times daily for 10 days to shorten the duration of the disease )

THANK  
YOU

