SKIN
LICHENOID REACTIONS

Kenneth Alonso, MD, FACP

Lichenoid tissue reaction

- Noninflammatory
- Focal
- With telangiectasia, keratosis, or atrophy

  Poikiloderma
- With epidermal atrophy

  Dermatomyositis

  Lupus erythematosis

Lichenoid tissue reaction

- Histology
- Basal Cell Degeneration
- Band-like Infiltrate Only
- Grenz Zone (sparing of dermis between the basal layer and the band like infiltrate)

With eosinophils

granuloma faciale

With naked tubercles

sarcoidosis

With histiocytes and foam cells

lepromatous leprosy

Lichen planus

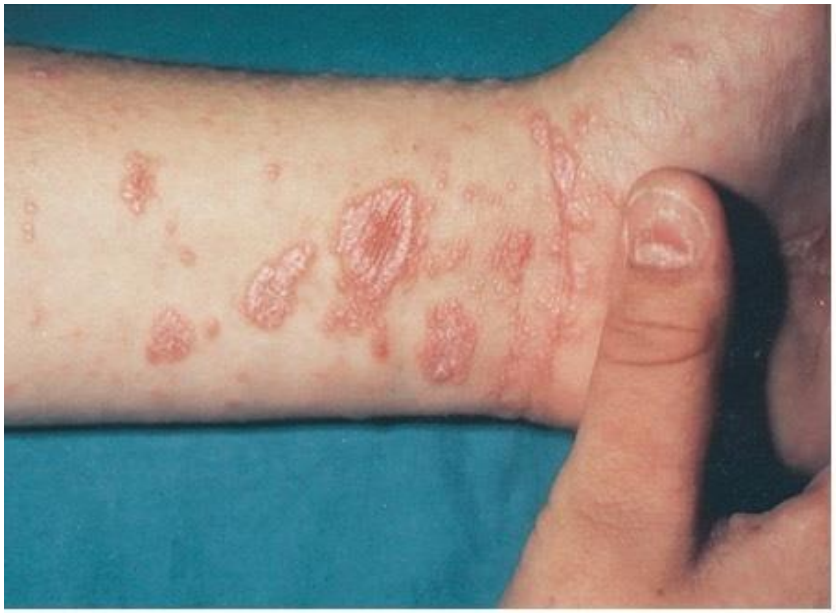


Fig. e10-19 Accessed 07/16/2010

Lichen planus

- 30-60 years-old
- More common in women
- Usually asymptomatic
- May be pruritic
- Mucsoal ulcerations may be painful
- Characterized by pruritic, purple, polygonal, planar, papules, and plaques ("Six P's")
- White dots or lines on papule surfaces (Wickham striae)
- Usually on the wrists or legs.
- Lace-like lesions may be seen in oral mucosa.

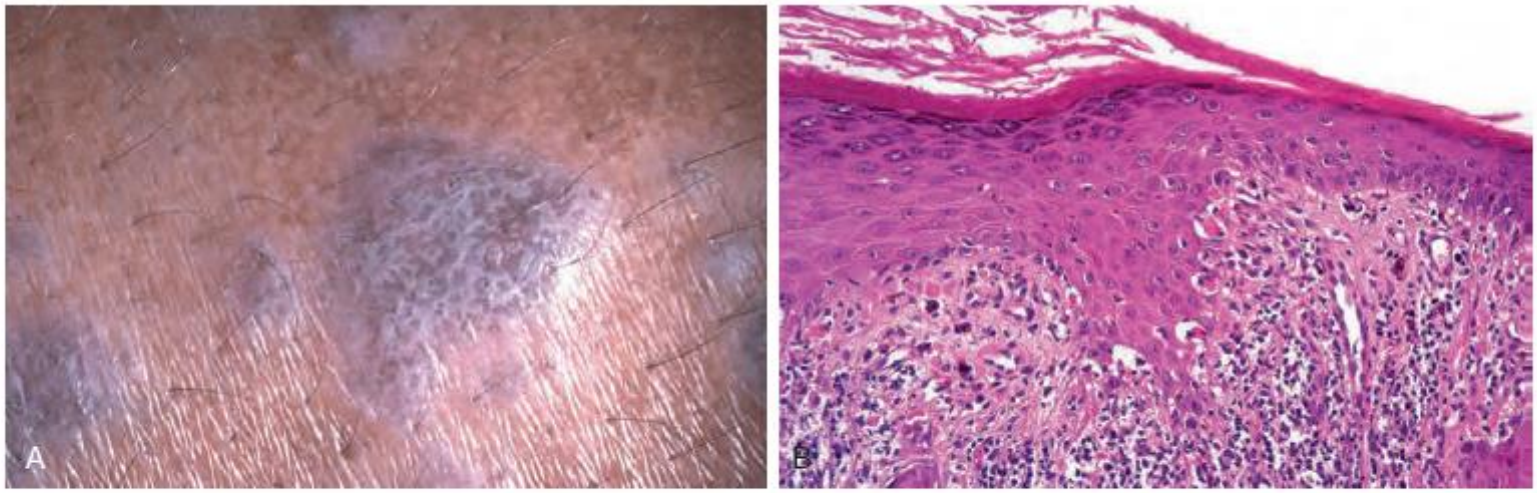
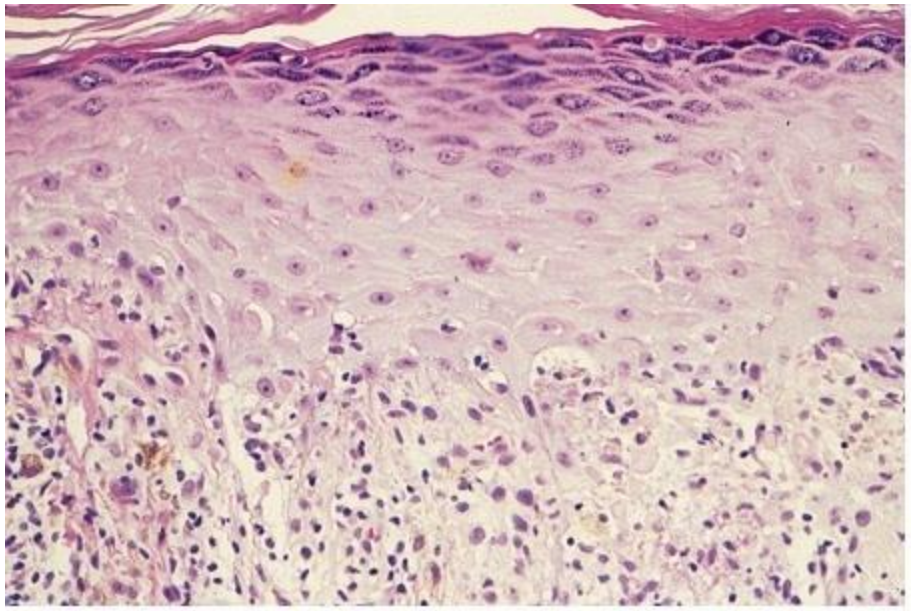


Figure 25-26 Lichen planus. **A,** This flat-topped pink-purple, polygonal papule has a white lacelike pattern of lines that are referred to as Wickham stria. **B,** There is a bandlike infiltrate of lymphocytes at the dermoepidermal junction, hyperkeratosis, and pointed rete ridges (sawtoothing), the latter as a result of chronic basal cell layer injury.

Lichen planus

- Histology
- Hyperkeratosis
- Diffuse basal cell degeneration
- Band-like infiltrate of lymphocytes in the dermis. (interface dermatitis).
- Epithelial claws are seen into dermis.
- Anucleate necrotic basal keratinocyte cells incorporated into inflamed papillary dermis. (Civatte or colloid bodies).
- Direct immunofluorescence reveals fibrin at the junction
- Generally self-limiting.

Lichen planus

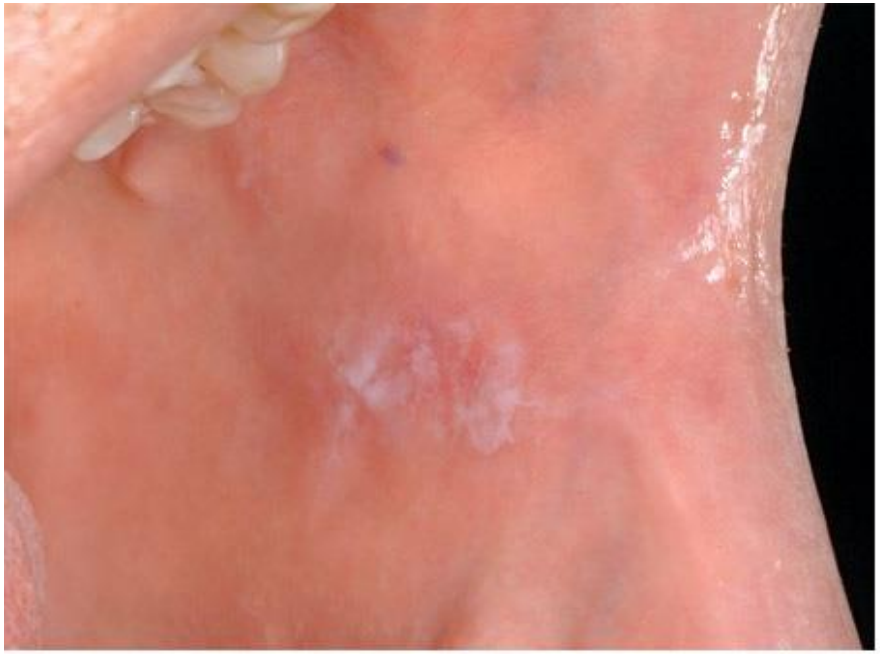


There is hyperkeratosis, wedge-shaped hypergranulosis, basal cell vacuolization, and a lymphocytic infiltrate at the dermal-epidermal junction. This infiltrate "hugs" the basal cell layer and is associated with many cytoid bodies.

Fig. 6-12 Accessed 07/16/2010

Oral lichen planus

- Hyperkeratosis.
- Diffuse basal cell degeneration.
- A band-like infiltrate of lymphocytes is present in submucosal tissues.
- Eosinophils suggest drug reaction.



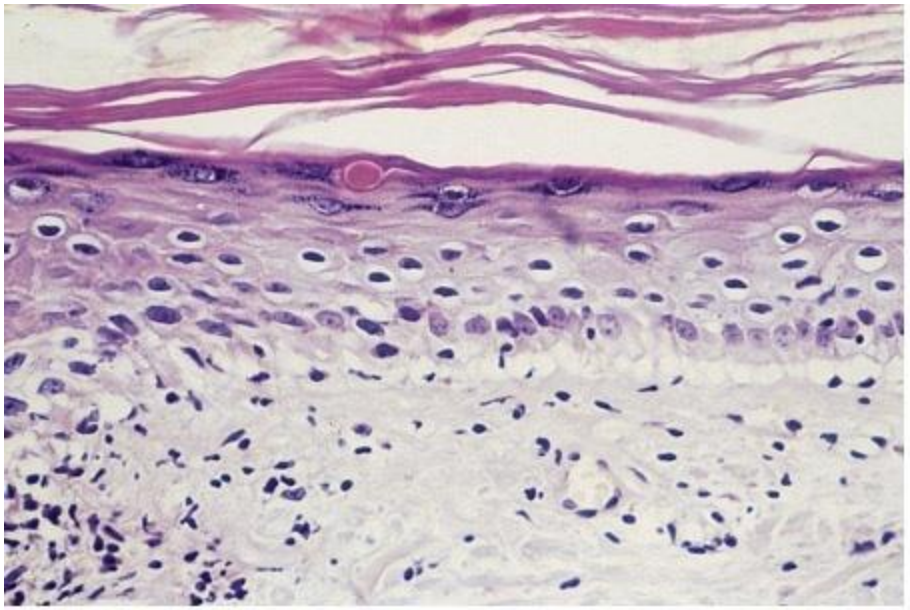
Source: Fauci AS, Kasper DL, Braunwald E, Hauser SL, Longo DL, Jameson JL, Loscalzo J:
Harrison's Principles of Internal Medicine, 17th Edition: http://www.accessmedicine.com

Fig. e7-2 Accessed 07/16/2010

Lupus erythematosus

- Hallmarks of lupus erythematosus:
- Inflammation, edema, and a lymphocytic infiltrate in the papillary body and superficial venular plexus
- Also the deeper layers of the dermis
- The main target is the dermal-epidermal junction.
- Blister formation within lupus lesions occurs above the lamina densa
- Bullous eruptions may also occur in the dermis (anticollagen type VII autoantibody)
- Immune complexes are primarily found within and underneath the basal lamina.
- Linear fluorescence pattern.

Lupus erythematosus



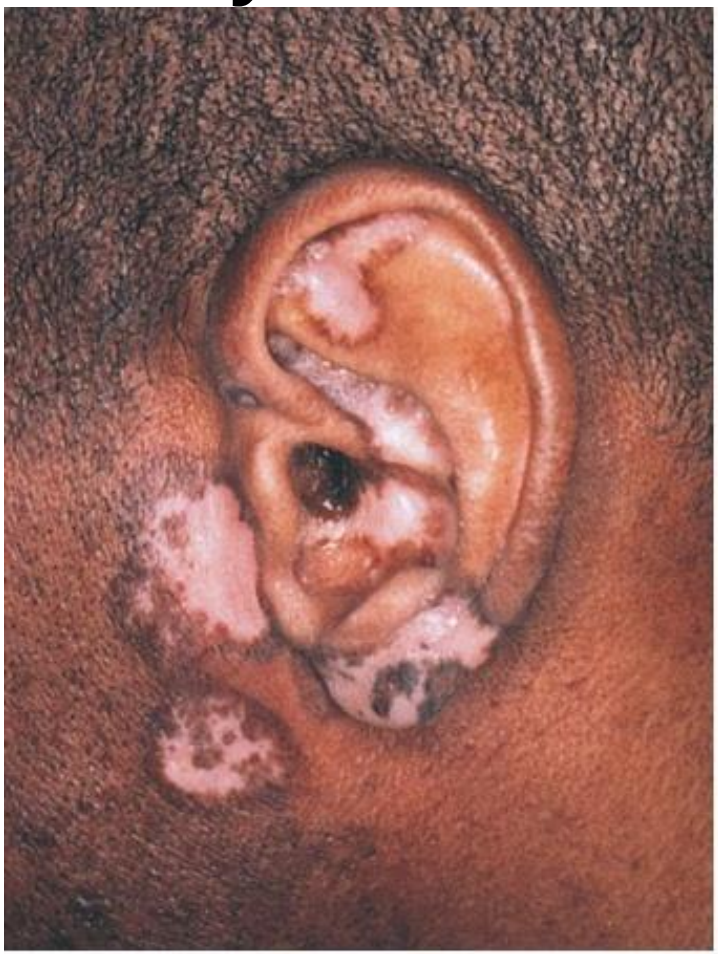
Hyperkeratosis, thinned epidermis devoid of rete ridges, and vacuolization of the basement membrane zone are present.

Fig. 6-11 Accessed 07/16/2010

Chronic cutaneous (discoid) lupus erythematosus

- Violaceous, hyperpigmented, atrophic plaques
- Often with evidence of follicular plugging
- May result in scarring.
- Leave areas of depigmentation and white scars.
- If hair follicles destroyed, may lead to alopecia ("carpet tack").
- May be verrucoid.
- Face, head, neck.
- Rare on palms or soles.
- Uncommon for patients with cutaneous lupus erythematosus to have systemic disease.

Chronic cutaneous (discoid) lupus erythematosus



(Courtesy of Marilynne McKay, MD; with permission.)
Fig. e10-60 Accessed 07/16/2010

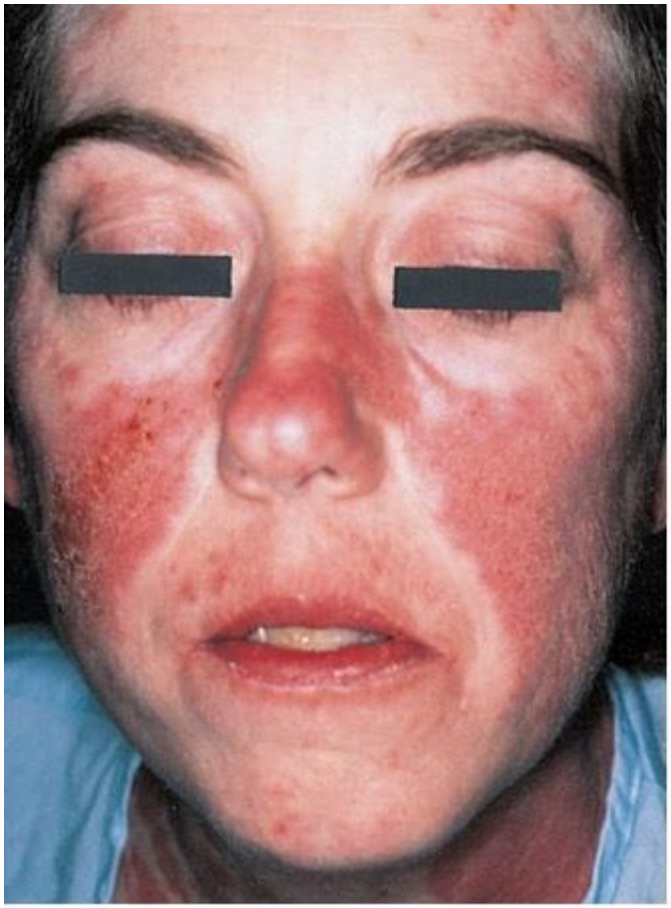
Systemic lupus erythematosus

- Females 8:1 ratio
- Onset 30 years-old (females)
- Onset 40 years-old (males)
- More common in those of sub-Saharan origin
- 80% present with an erythematous, confluent, butterfly eruption over malar area
- 80% will have ulcers arise in necrotic papular lesions in palate and oropharynx
- May see discrete papular or uriticarial lesions on face, arms, and dorsa of hands
- Hemorrhagic bullae during acute flares

Systemic lupus erythematosus

- 50% will have lymphadenopathy
- 50% will have renal disease
- 30% will have hepatomegaly
- 30% will have myopathy
- 20% will have carditis
- 20% will have pneumonitis
- 15% with peripheral neuropathy
- 15% with seizures
- 10% present with psoriaform lesions
- Anti-double stranded DNA is positive (diagnostic)
- 5 year survival is 93%

Systemic lupus erythematosus



Characteristic malar ("butterfly") rash.

Fig. e10-60 Accessed 07/16/2010