



Acute Dermatoses (Days to Weeks)

- Urticaria
- Eczema / Atopic Dermatitis
- Erythema Multiforme

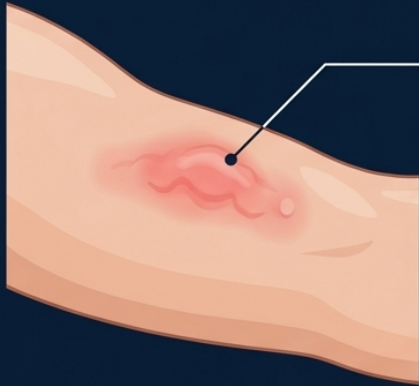
Chronic Dermatoses (Months to Years)

- Psoriasis
- Lichen Planus
- Lichen Simplex Chronicus

Blistering Disorders (Autoimmune Architecture)

- Pemphigus Vulgaris & Foliaceus
- Bullous Pemphigoid

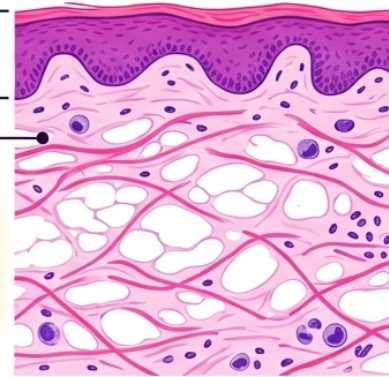
The Disease: Urticaria (Hives)



Macro (Clinical)

Triggered by an antigen exposure (e.g., bug bite, drug). Presents as raised, erythematous wheals. Crucially, the lesions fade within hours (transient).

EXAM FOCUS:
Diagnosis Requires
History + H&E



Micro (Pathology)

Features a normal epidermis. The defining feature is **Superficial Dermal Edema**, where collagen bundles are pushed apart by fluid. No specific cellular characteristics exist without knowing patient's history.

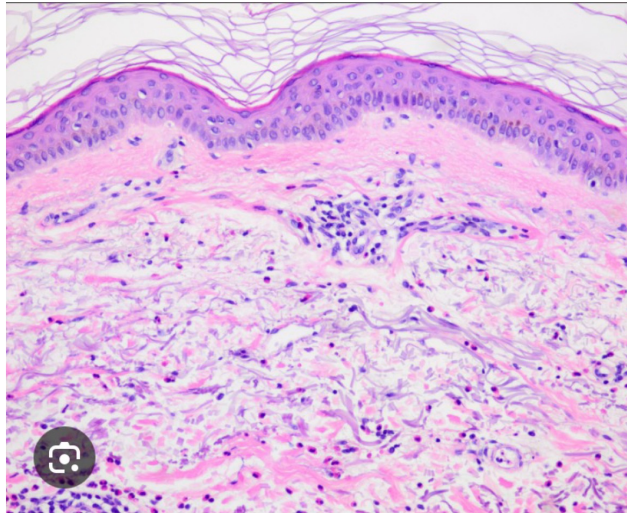
Macroscopically



Extra images



Wheel appearance



Microscopically

Highlighted by Giemsa stain

The Disease: Eczema & Atopic Dermatitis

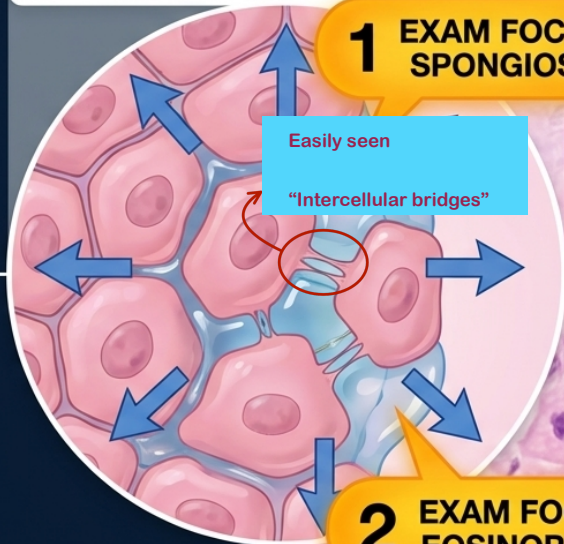
Macro

- Intensely pruritic (itchy), red, oozing plaques. Can be triggered by irritants, drugs, or photo-sensitivity.

The Atopic Triad

Connection: Patients frequently present with Asthma, Allergic Rhinitis, and Atopic Dermatitis.

The Spongiosis Stretch



1 EXAM FOCUS: SPONGIOSIS

Micro

- Epidermal edema (Spongiosis). Fluid physically forces keratinocytes apart.
- Lab Finding: Elevated Eosinophils in the blood are a hallmark of this patient profile.

2 EXAM FOCUS: EOSINOPHILS

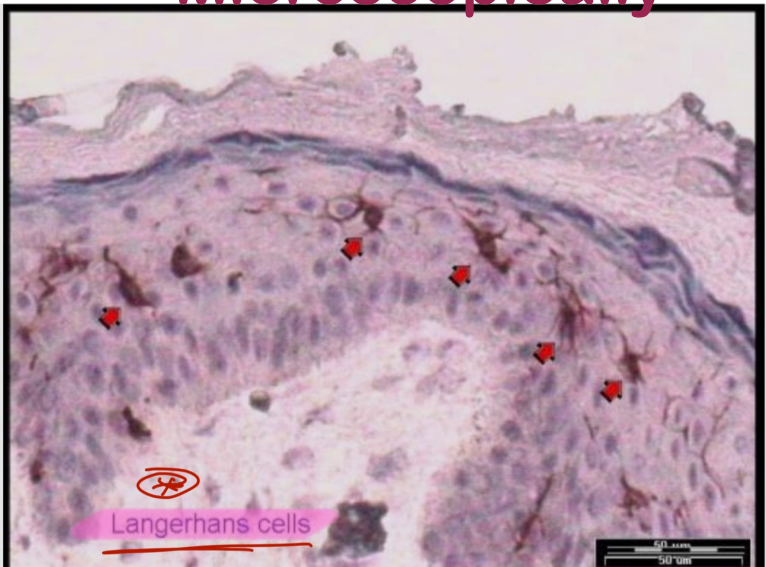
▪ With persistent antigen exposure, lesions may become scaly (hyperkeratotic) as the epidermis thickens (acanthosis).



Macroscopically



Microscopically



Allergic
contact
dermatitis

The Disease: Erythema Multiforme

Macro (Clinical)

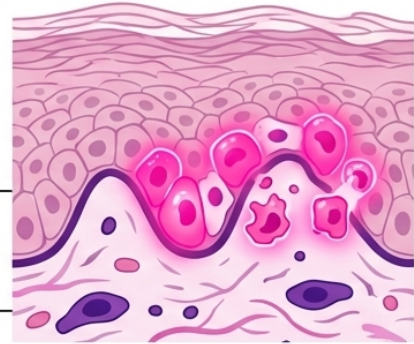


**EXAM FOCUS:
TARGET LESIONS
& APOPTOSIS**

Trigger: Often initiated by an infection or drug reaction (e.g., CD8+ T-cell mediated).

Macro: Multiform lesions (macules, papules, vesicles) boasting a characteristic Targetoid appearance.

Micro (Pathology)



Micro: Interface dermatitis. Look for prominent eosinophilic apoptotic keratinocytes specifically dying at the dermoepidermal junction.

Macroscopically



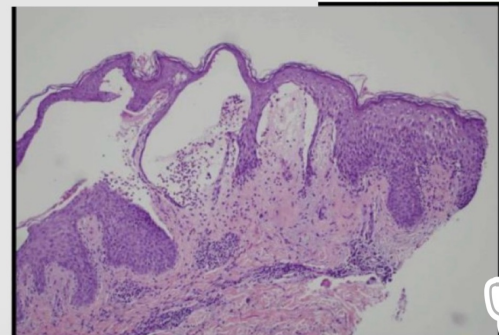
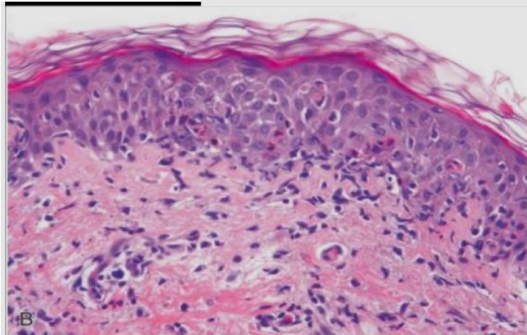
Microscopically

Early lesions show

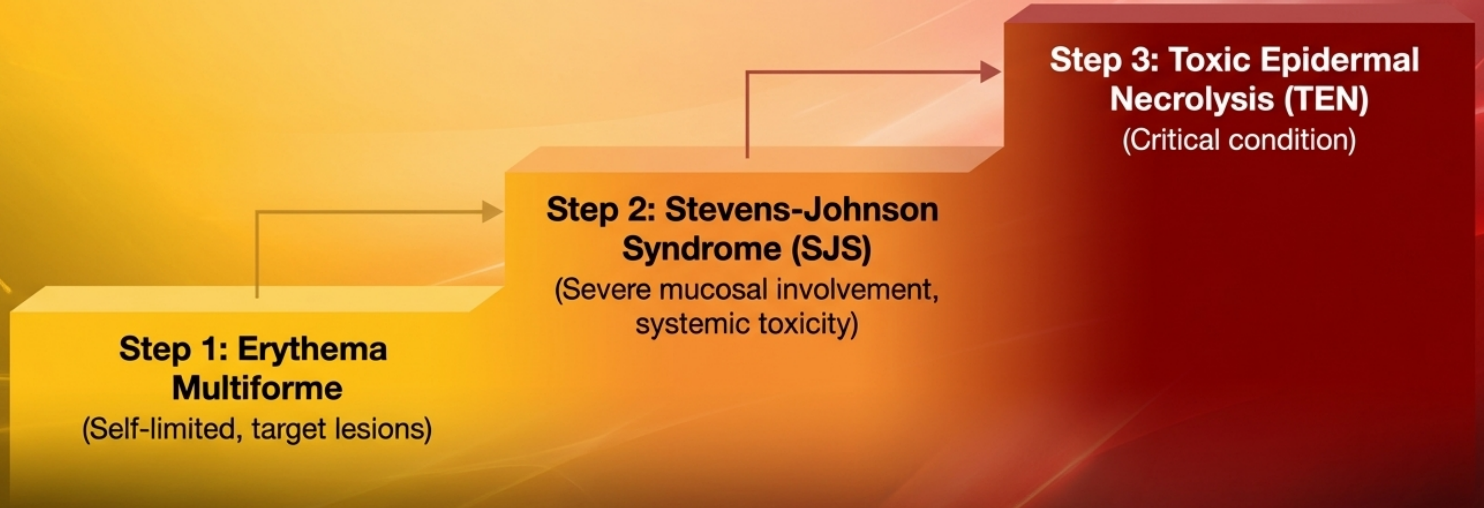
- superficial perivascular lymphocytic infiltrate.
- dermal edema.
- margination of lymphocytes along the dermoepidermal junction with apoptotic keratinocytes.

With time

- discrete, confluent zones of basal epidermal necrosis appear, with concomitant blister formation.

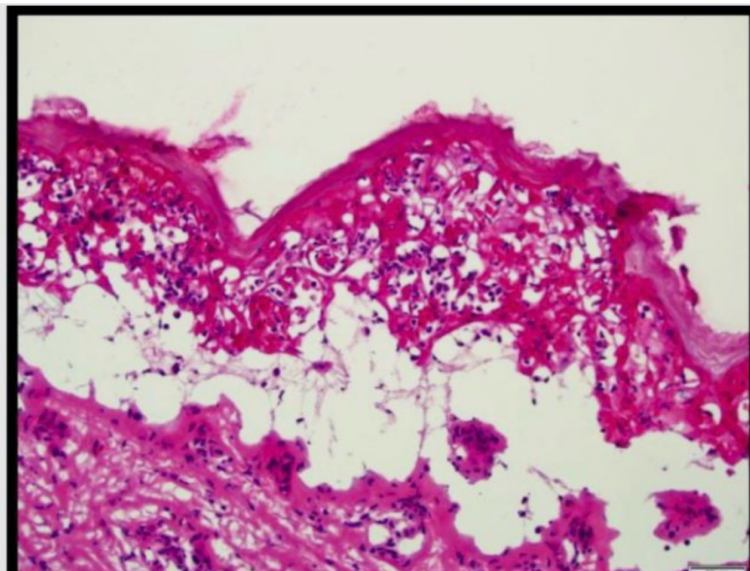
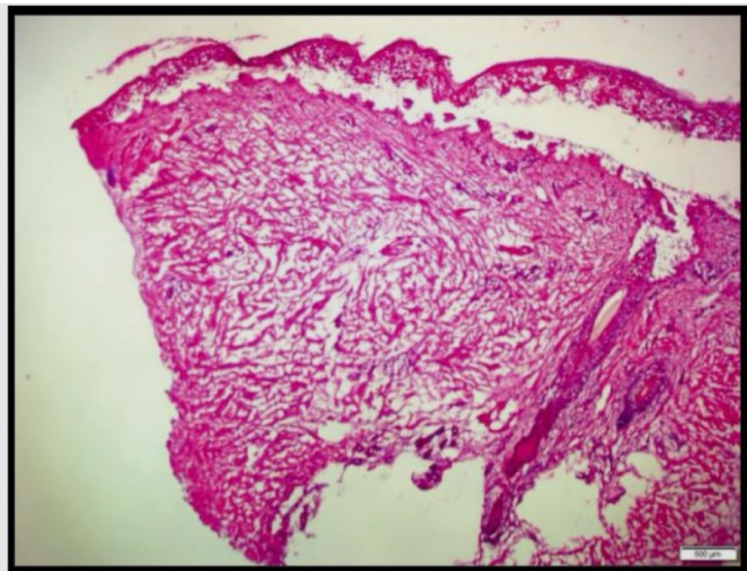


The Life-Threatening Variants



Clinical Picture: Looks like severe burns. Characterized by the sloughing of large areas of skin.

Immediate Risks: Hypovolemic shock and severe secondary infections. Requires immediate ICU or Burn Unit admission.



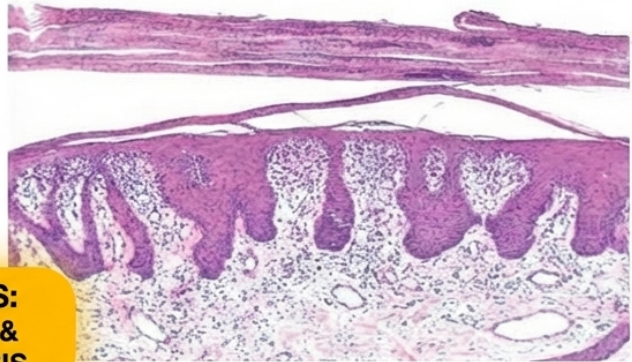
The Disease: Psoriasis



Pathogenesis: T-cell mediated autoimmune hyperproliferation of keratinocytes.

Macro: Well-demarcated pink plaques covered by loosely adherent silver-white scales. Frequently on elbows, knees, and scalp.

**EXAM FOCUS:
RETE RIDGES &
PARAKERATOSIS**



Micro:

1. Acanthosis with regular, downward elongation of rete ridges (test-tube appearance).
2. Loss of the stratum granulosum.
3. Extensive parakeratotic scale (nuclei abnormally retained in the horny layer).

- Nail changes on the fingers and toes occur in 30% of cases.



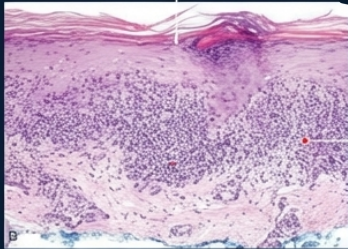
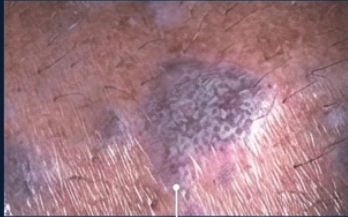
Chronic Dermatoses: The Lichen Comparison

THE 6 Ps & CIVATTE BODIES

Lichen planus
Pruritic, Purple,
Polygonal, Planar,
Papules, Plaques,

Features white
Wickham striae.

Micro: Prototypical
interface dermatitis with
a dense, continuous
band of lymphocytes
at the junction and
Civatte bodies.



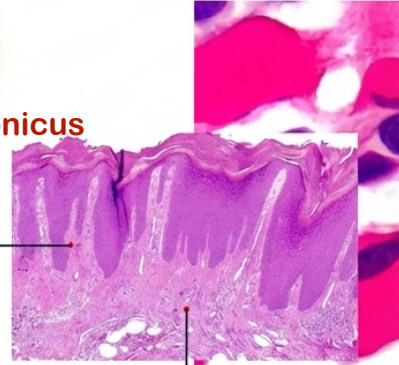
REPETITIVE TRAUMA

Lichen simplex chronicus

A response to local
repetitive rubbing or
scratching.

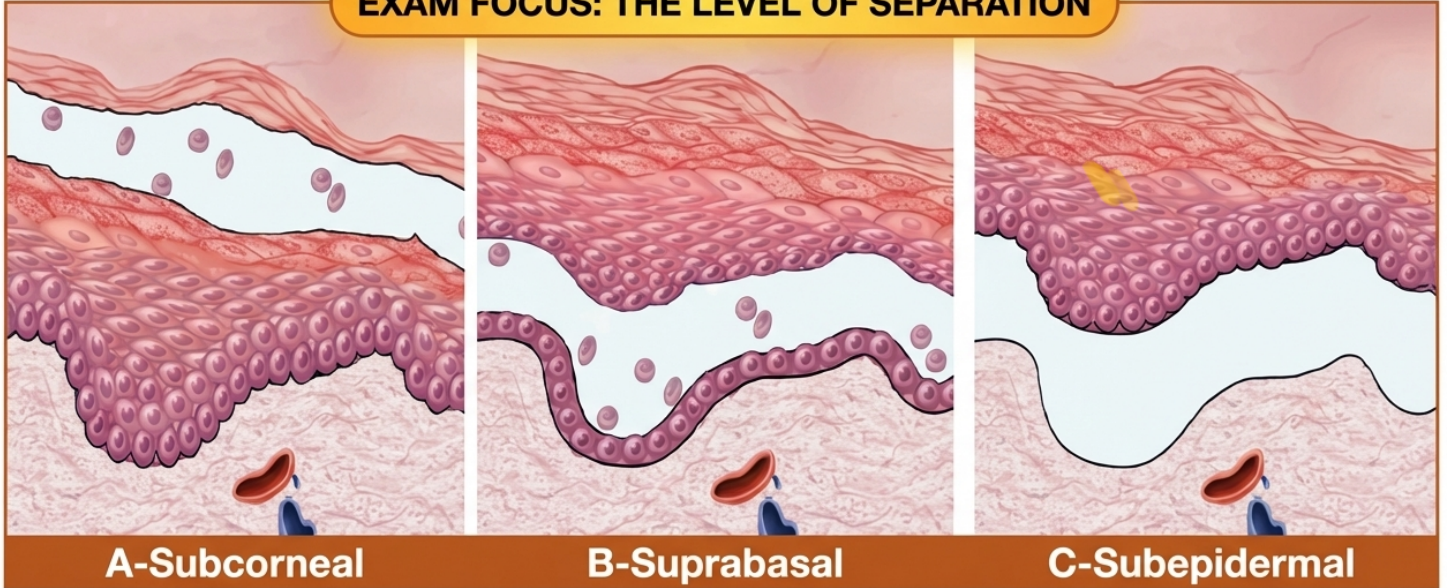
Manifests as roughening
of the skin.

Micro: Characterized by
acanthosis,
hyperkeratosis, and
hypergranulosis.



The Architecture of Blistering

EXAM FOCUS: THE LEVEL OF SEPARATION



Diagnosing a bullous disease requires pinpointing the exact layer where the skin splits.
Key Concept: Acantholysis – The pathological lysis of intercellular adhesive junctions (desmosomes) between neighboring squamous epithelial cells, resulting in detached cells.

The Disease: Pemphigus (Vulgaris & Foliaceus)

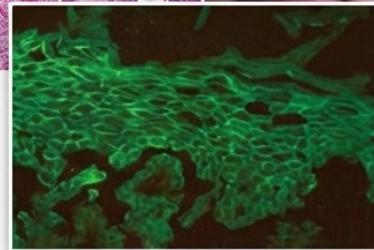
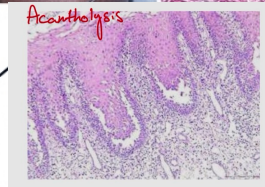
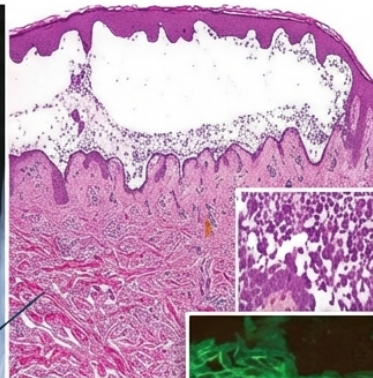
MACRO: CLINICAL PRESENTATION & PATHOGENESIS

Pathogenesis: Type II Hypersensitivity. IgG autoantibodies attack intercellular desmosomal proteins -> causing Acantholysis.

Pemphigus Vulgaris (Common): Suprabasal blister. Leaves a deep erosion. Blisters are superficial, flaccid, and rupture easily. Involves mucosa.

Pemphigus Foliaceus (Rare): Subcorneal blister. More benign, superficial, primarily confined to skin.

EXAM FOCUS:
FISHNET PATTERN
& SUPRABASAL

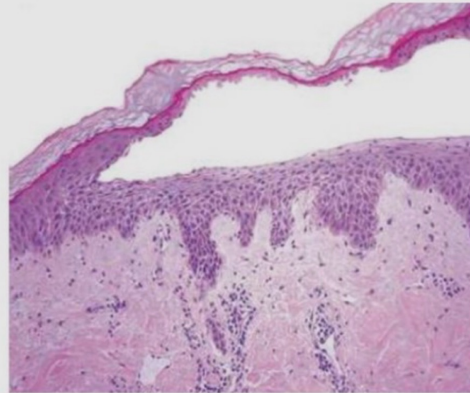


Immunofluorescence: Uniform deposition of **IgG** along cell membranes creates a distinctive Fishnet pattern.

Pemphigus foliaceus:



less severely eroded than those seen in pemphigus vulgaris.



subcorneal blister.



The Disease: Bullous Pemphigoid

MACRO: CLINICAL PRESENTATION & PATHOGENESIS

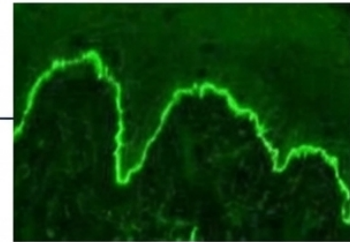
Pathogenesis: IgG autoantibodies target the epidermal basement membrane. Crucially, this is Non-acantholytic.

Macro: Tense bullae filled with clear fluid. Because the blister roof consists of the full epidermal thickness with intact junctions, they do not rupture easily.

EXAM FOCUS: SUBEPIDERMAL & LINEAR BAND

MICRO: HISTOLOGY & IMMUNOFLUORESCENCE

Subepidermal vesicle with inflammatory infiltrate rich in eosinophils.



Immunofluorescence: Deposition of IgG appears as a stark, continuous **Linear** outlining the basement membrane.

THE DIAGNOSTIC MATRIX: Blistering Diseases

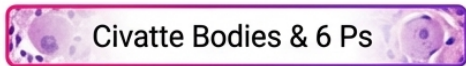
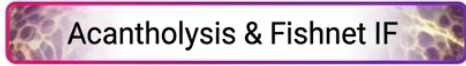
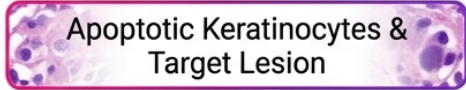
	Pemphigus Vulgaris	Pemphigus Foliaceus	Bullous Pemphigoid
Pathogenesis Target	Desmosomes	Desmosomes	Basement Membrane
Split Level	Suprabasal	Subcorneal	Subepidermal
Blister Type	Flaccid (ruptures easily)	Superficial / Crusting	Tense (does not rupture)
Acantholysis	Yes	Yes	No
IF Pattern	Fishnet <small>EXAM FOCUS: FISHNET PATTERN & SUPRABASAL</small>	Fishnet (superficial) <small>EXAM FOCUS: SUPERFICIAL FISHNET & SUBCORNEAL</small>	Linear Band <small>EXAM FOCUS: SUBEPIDERMAL & LINEAR BAND</small>

EXAM FOCUS:
SUBEPIDERMAL &
LINEAR BAND

EXAM FOCUS:
SUBEPIDERMAL &
LINEAR BAND

The Pathological Glossary: Hardwiring the Buzzwords

MICROSCOPIC BUZZWORDS



CLINICAL DIAGNOSES

Eczema / Atopic Dermatitis

Psoriasis

Erythema Multiforme

Pemphigus (Vulgaris/Foliaceus)

Bullous Pemphigoid

Lichen Planus

**EXAM FOCUS:
LINEAR BAND &
SUBEPIDERMAL**



Lichen planus



Bullous pemphigoid



Psoriasis



Eczema



Pemphigus vulgaris



Erythema multiforme

لا تنسونا من صالح دعواتكم

و فلكم الله