



**European
Dermatology
Forum**



UNIVERSITÄTSMEDIZIN GÖTTINGEN **UMG**
Dept. of Dermatology

22nd Euroderm Excellence Training
Program

18- 21 November 2025 /
Rome, Italy



EDF Euroderm Excellence for
future leaders

Dermatopathology of inflammatory dermatoses

Prof. Christina Mitteldorf
University Medical Center Göttingen
Department of Dermatology, Venereology and Allergology

Access to digital slides...



Digital slide platform of the German Society of Dermatopathology (ADH)
Christina Mitteldorf / Julia Liersch

<https://www.adh-online.de>



Herzlich willkommen!

Wir begrüßen Sie auf der Webseite der Arbeitsgemeinschaft Dermatologische Histologie (ADH) – der Deutschen Gesellschaft für Dermatopathologie!

Unser Ziel ist die Stärkung der Dermatopathologie als integraler Bestandteil der Dermatologie. Auf dieser Seite möchten wir Sie über unsere Aktivitäten und Veranstaltungen informieren, um wissenschaftlichen Austausch zu stärken und qualifizierten Nachwuchs in der Dermatopathologie an Kliniken und in der Niederlassung fördern.

Zu unseren aktuellen Projekten zählen Fort- und Weiterbildungsangebote, digitale Fallsammlungen mit Auflösungen und Annotationen, die jährliche ADH-Jahrestagung mit Netzwerktreffen (für Aus- und Weiterbildung, Niederlassung und junge Dermatopathologie), Hospitationsstipendien, Projektförderungen sowie spezialisierte Kurse in molekularer Dermatopathologie.

Wir laden Sie herzlich ein, Teil der ADH zu werden.

Mit freundlichen Grüßen
Ihr Vorstand der ADH

Aktuelles

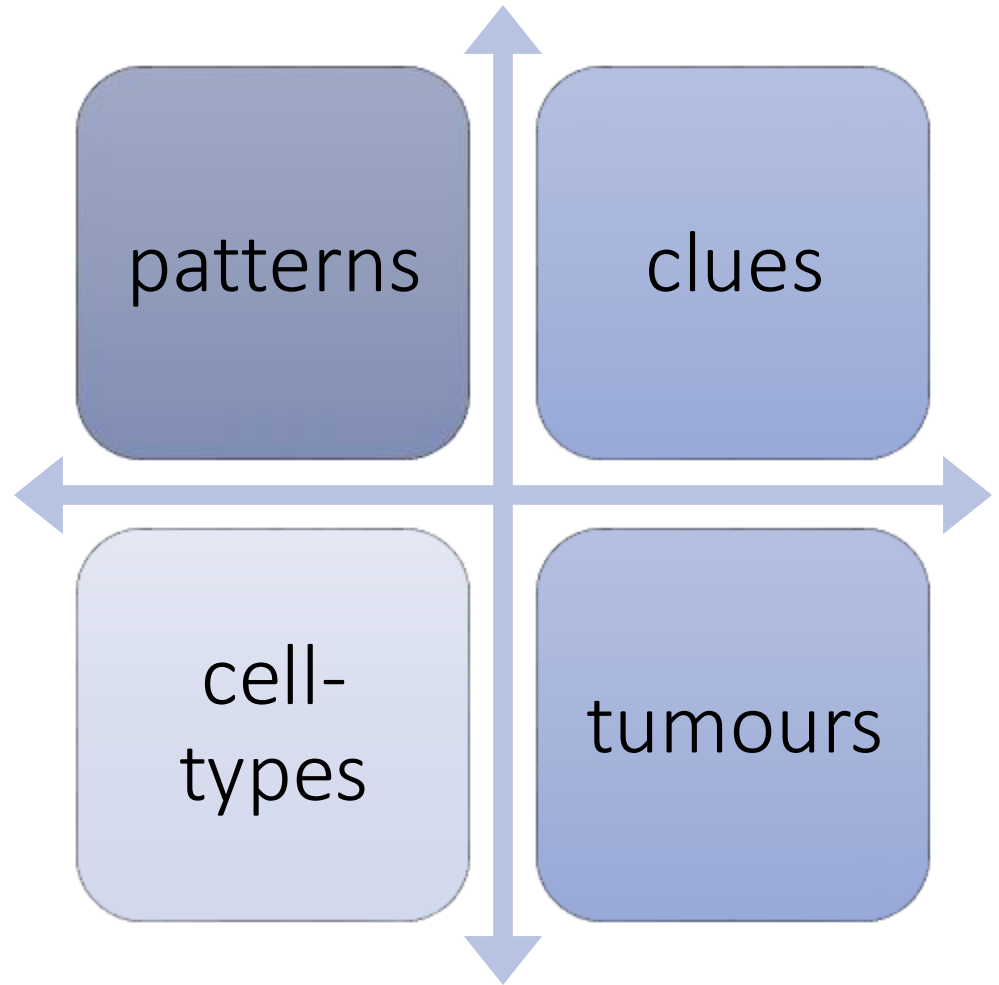


[Mitglied werden »](#)

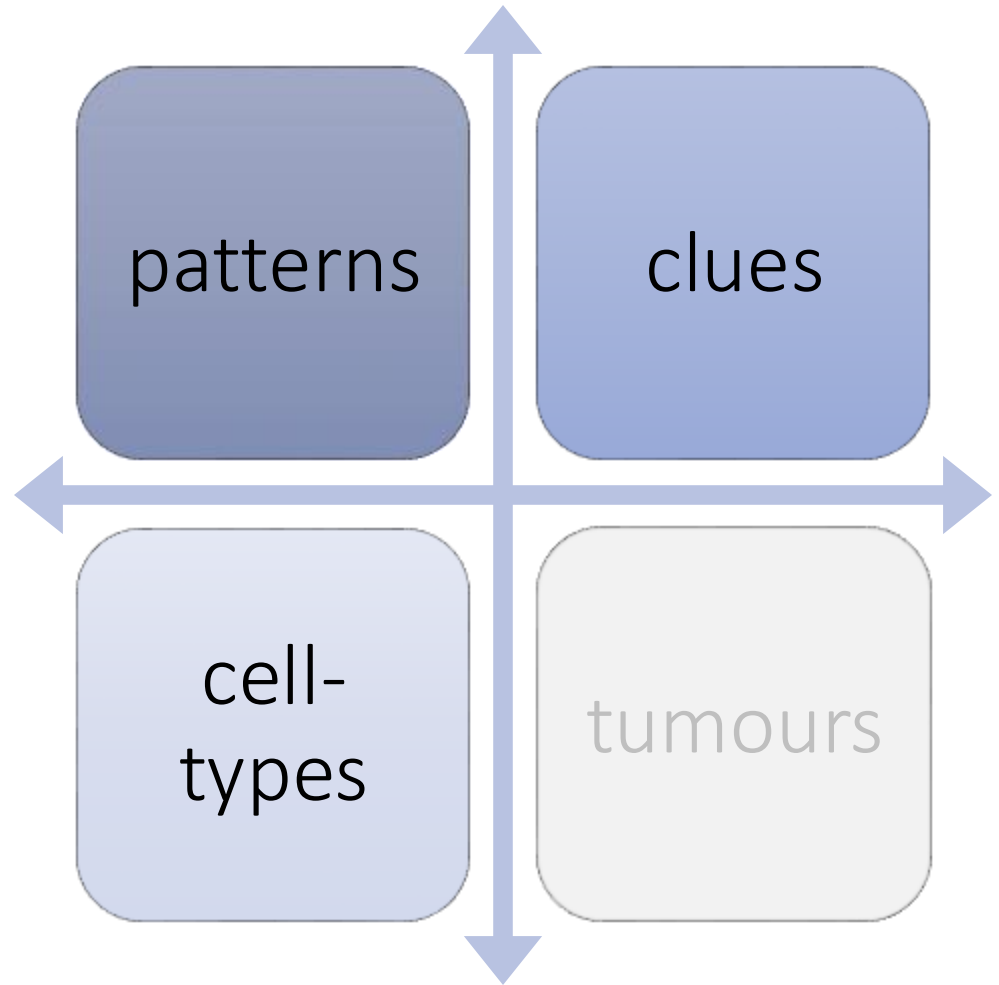
<https://adh.smartzoom.com/s8738/>

Password: rom25

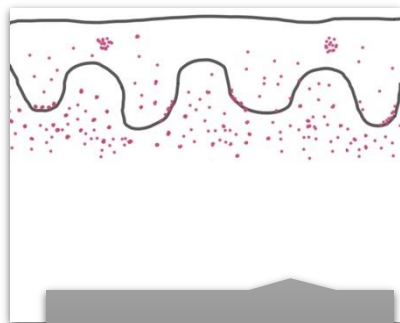
DIAGNOSTIC
BASICS
IN
DERMATO-
PATHOLOGY



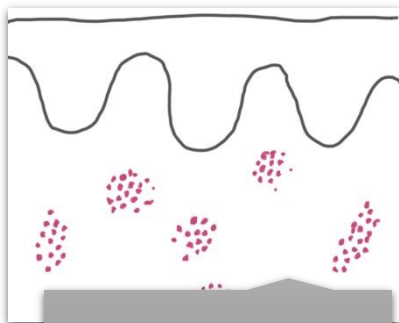
DIAGNOSTIC
BASICS
IN
DERMATO-
PATHOLOGY



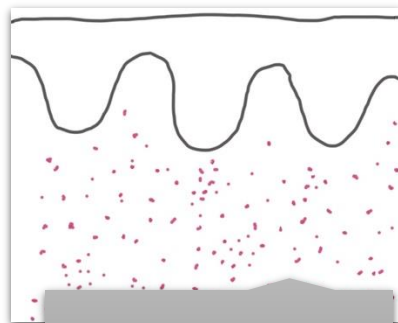
Patterns (examples)



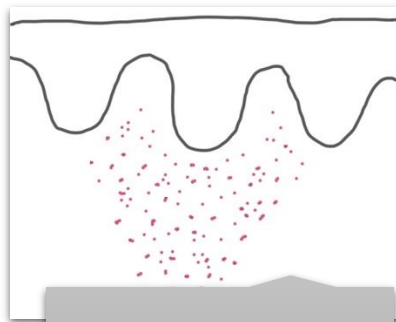
band-like, superficial



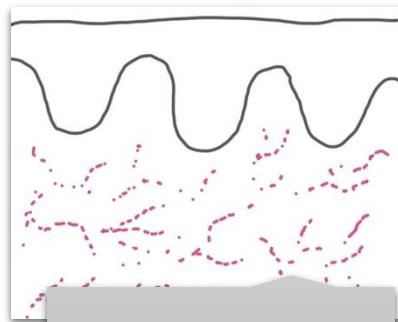
nodular



diffuse

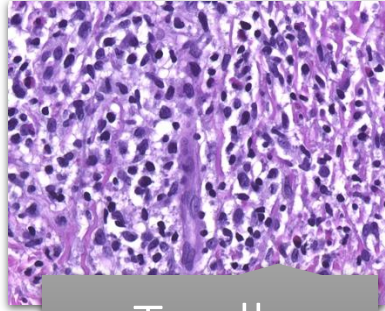


wedge-shaped

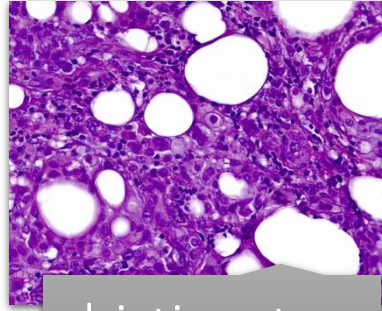


interstitial

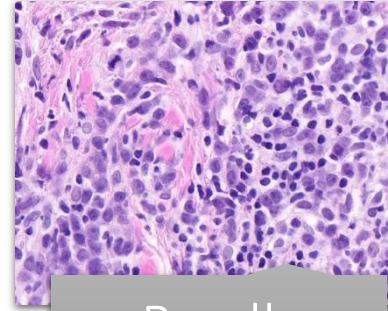
Cell types (composition of the infiltrate)



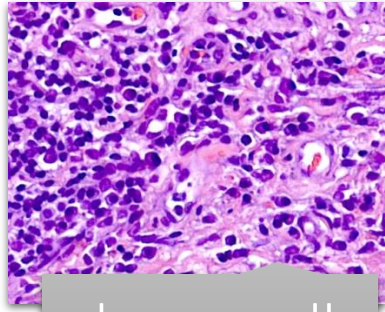
T-cells



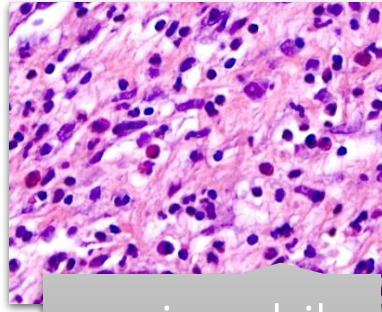
histiocytes



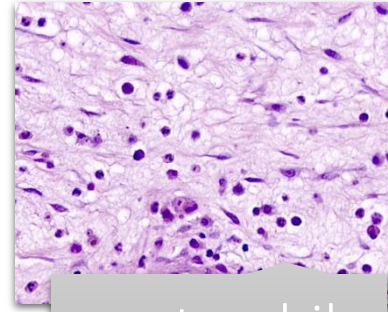
B-cells



plasma cells



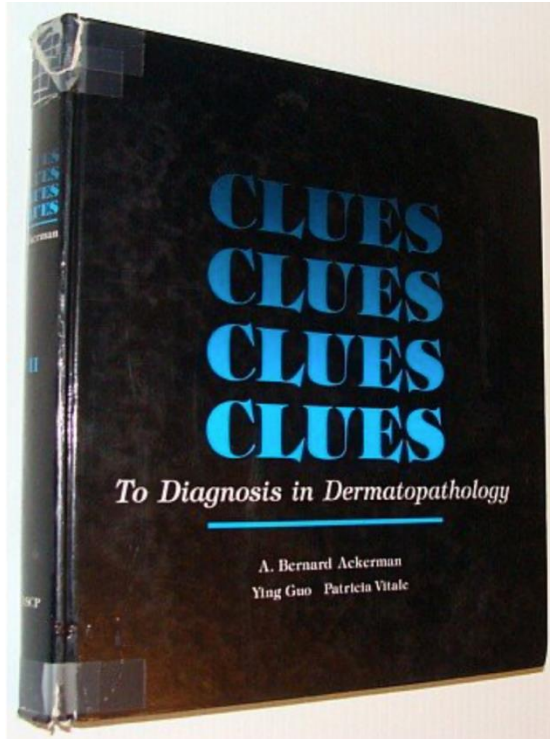
eosinophils



neutrophils

Clues

ChatGPT4.0: The word "clue" generally refers to a hint or piece of information that helps solve a problem or mystery.



300 Clues had been published:

- Tumours (about 50%)
- **Inflammatory diseases (about 30%)**
- Cysts
- Depositions
- Artefacts
- Rarities

Spongiosis

= intercellular edema with separation of keratinocytes and stretching of intercellular bridges

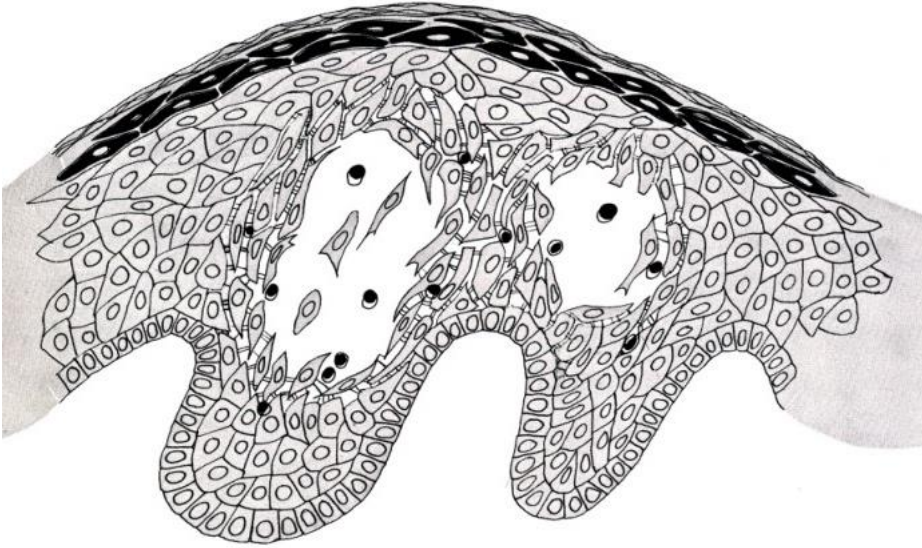
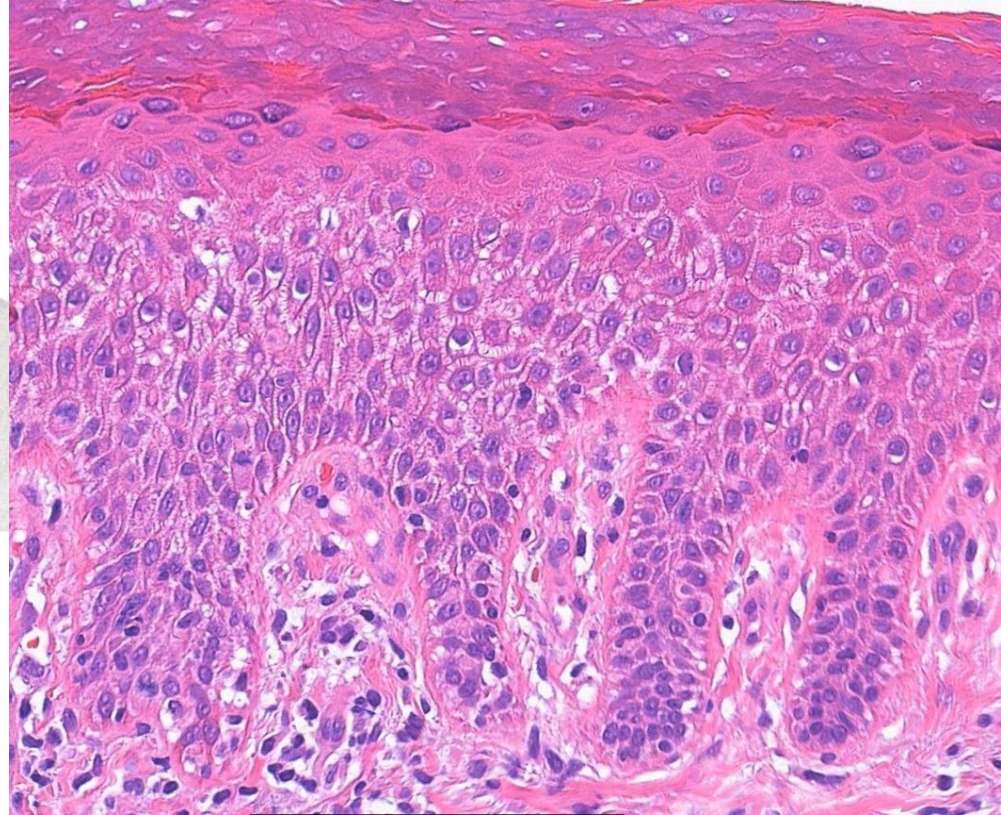


Fig. from: Ackerman: Histologic diagnosis of inflammatory skin diseases

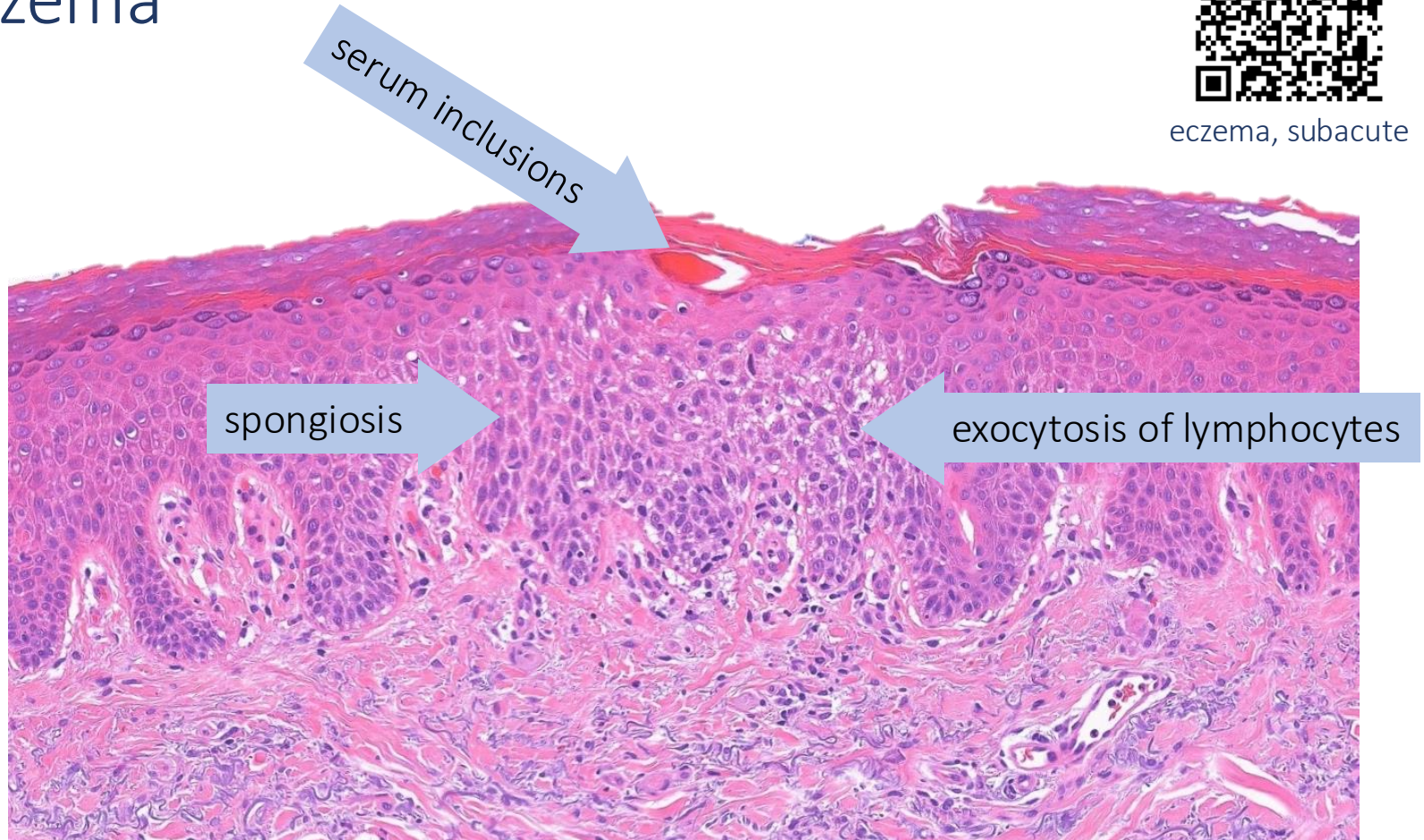
example: eczema



Eczema



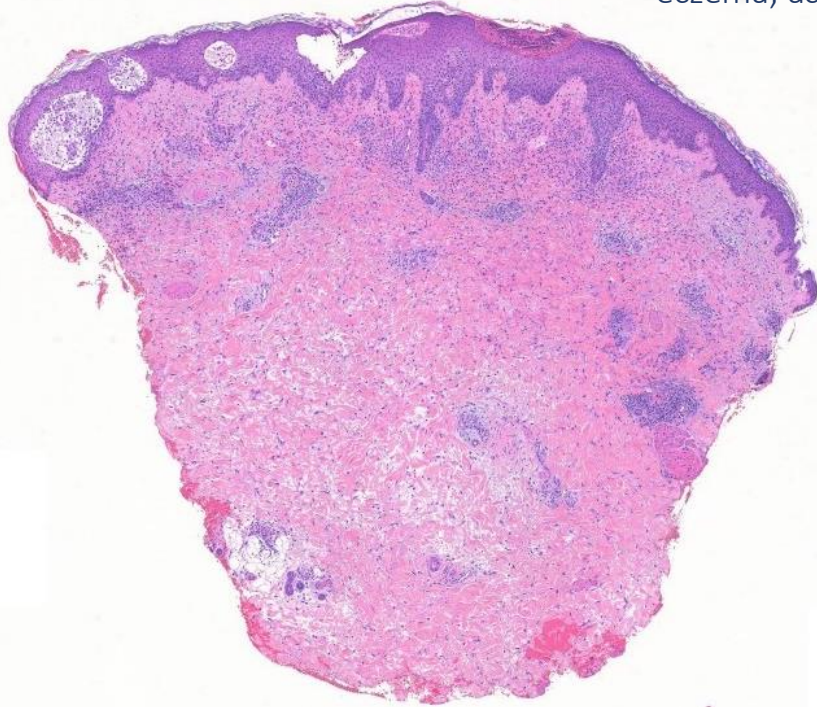
eczema, subacute



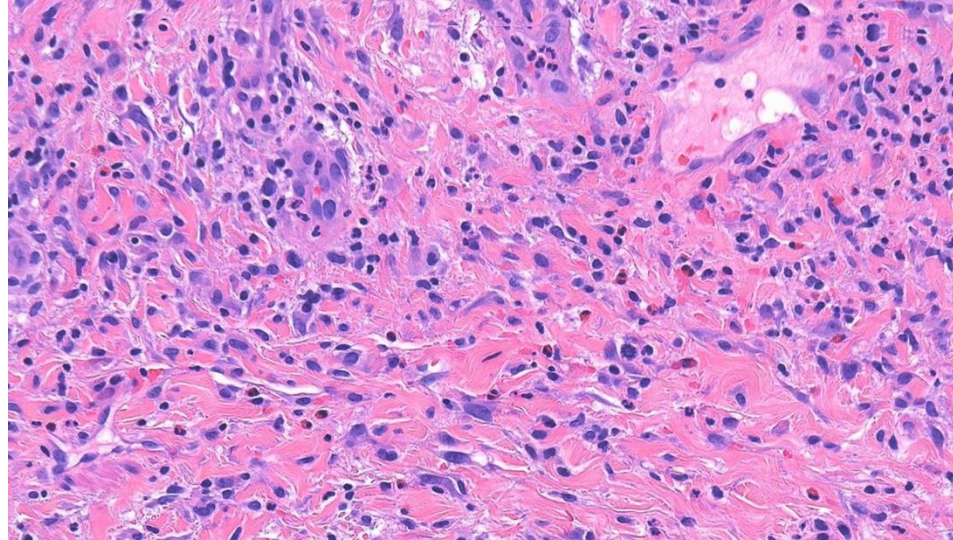
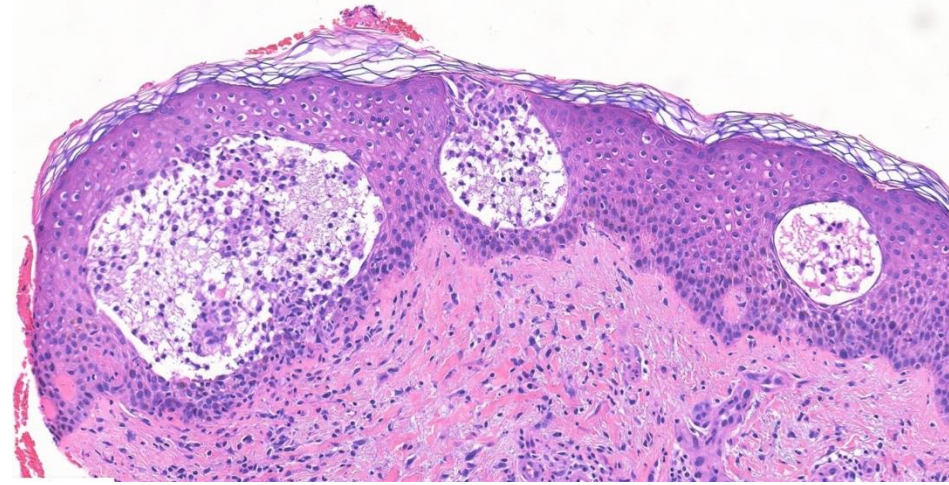
Eczema - acute



eczema, acute



eosinophils common in atopic dermatitis



Life of lesions

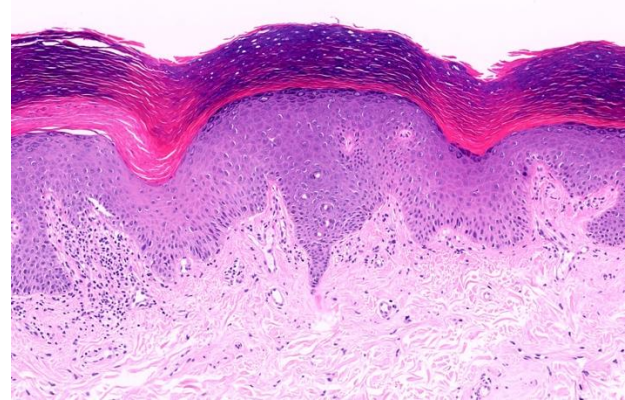
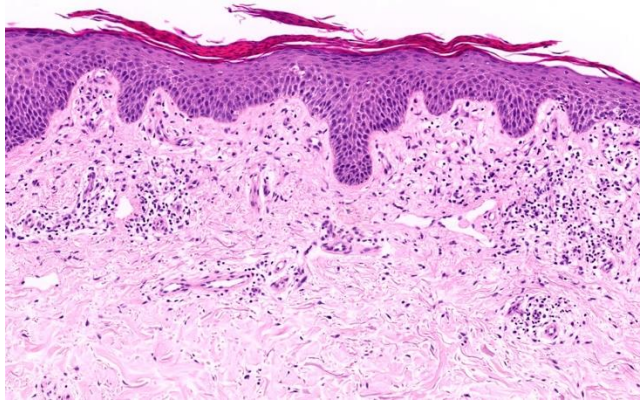
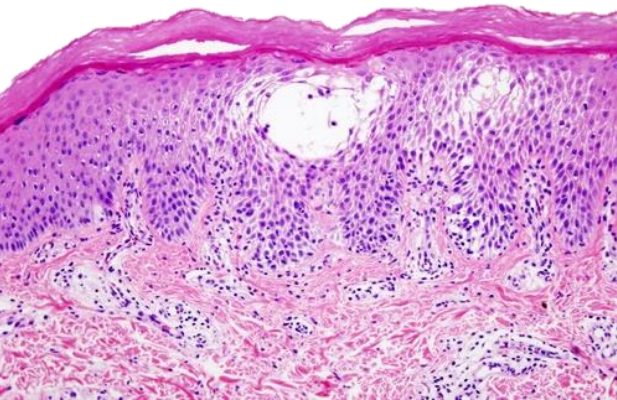
acute



subacute



chronic



Psoriasis vulgaris

pattern

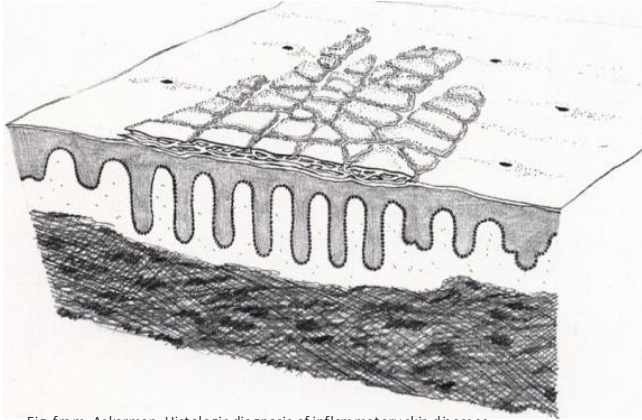
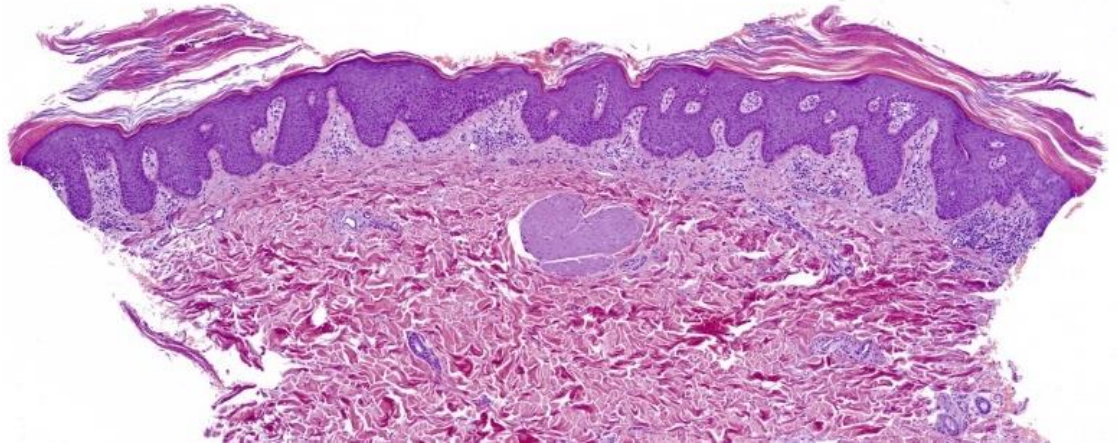


Fig. from: Ackerman: Histologic diagnosis of inflammatory skin diseases

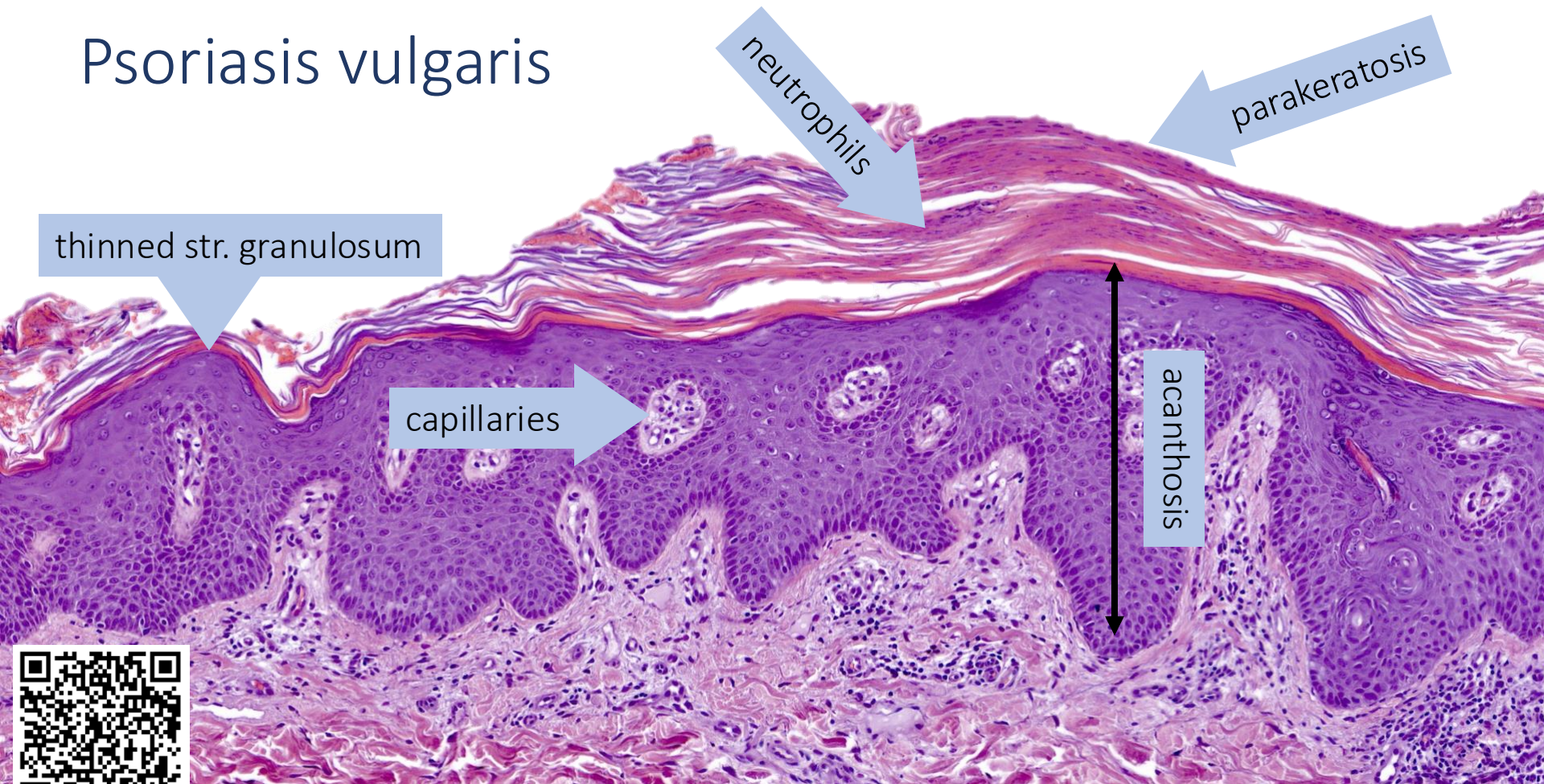


Psoriasiform pattern:

- Regular acanthosis
- Thinned or loss of granular layer
- Focal parakeratosis

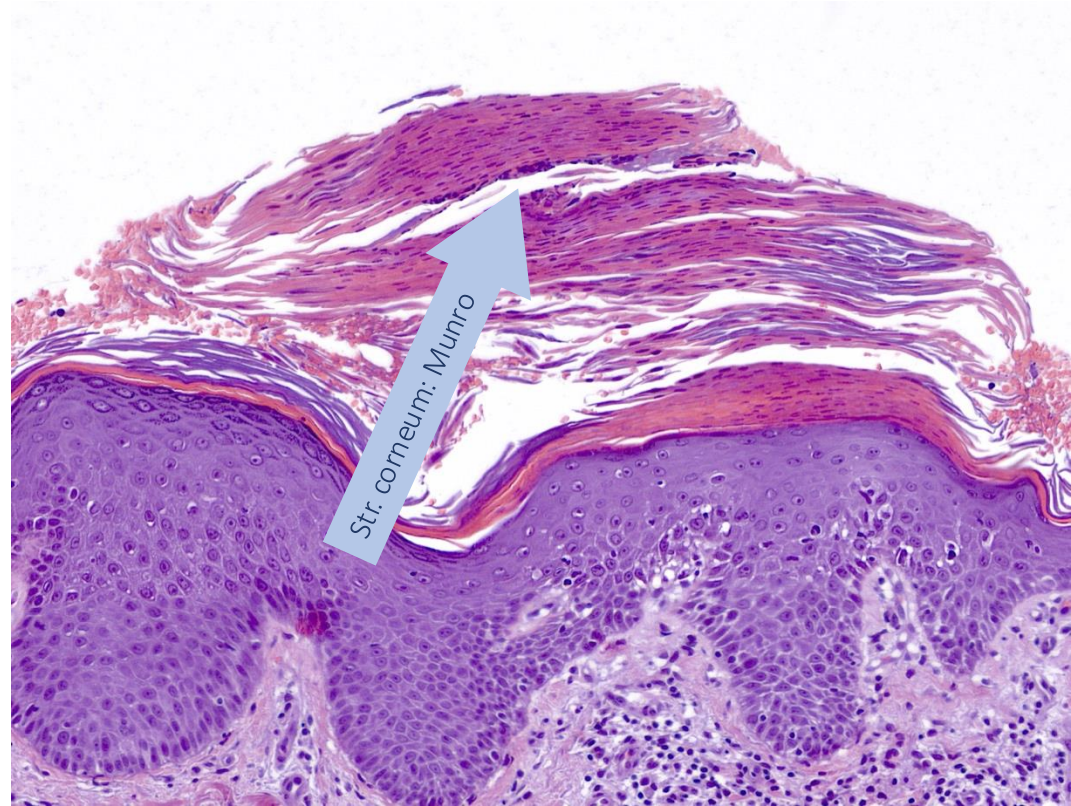
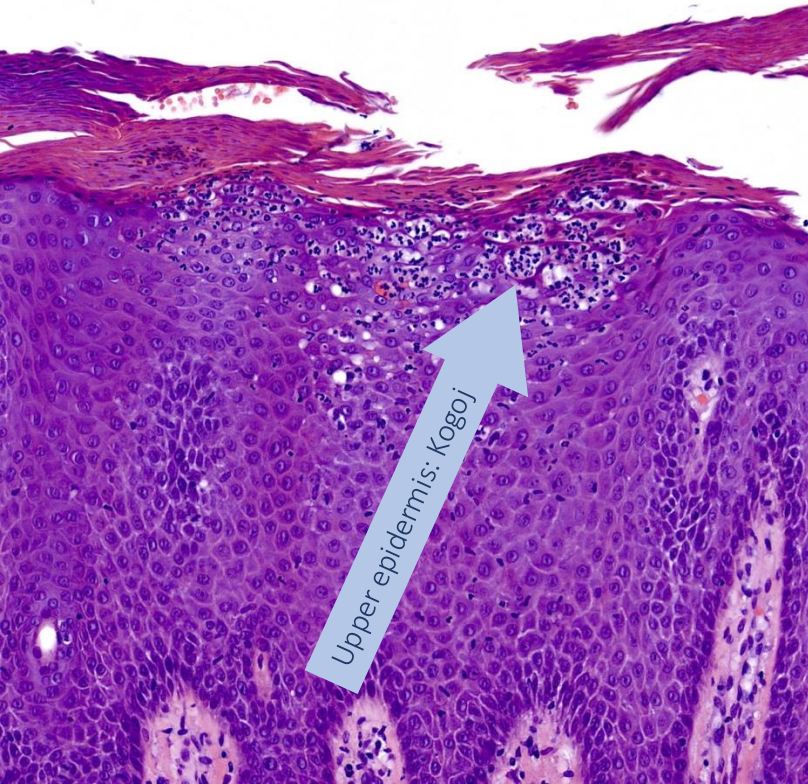


Psoriasis vulgaris



clue

microabscesses: collections of neutrophils



clue

Caveat!

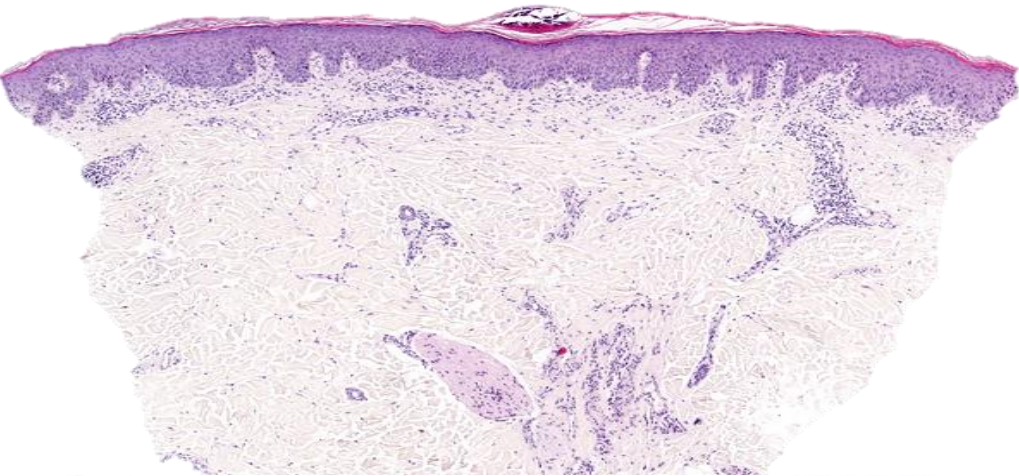


dermatophytosis

Not exclusively found in
psoriasis!

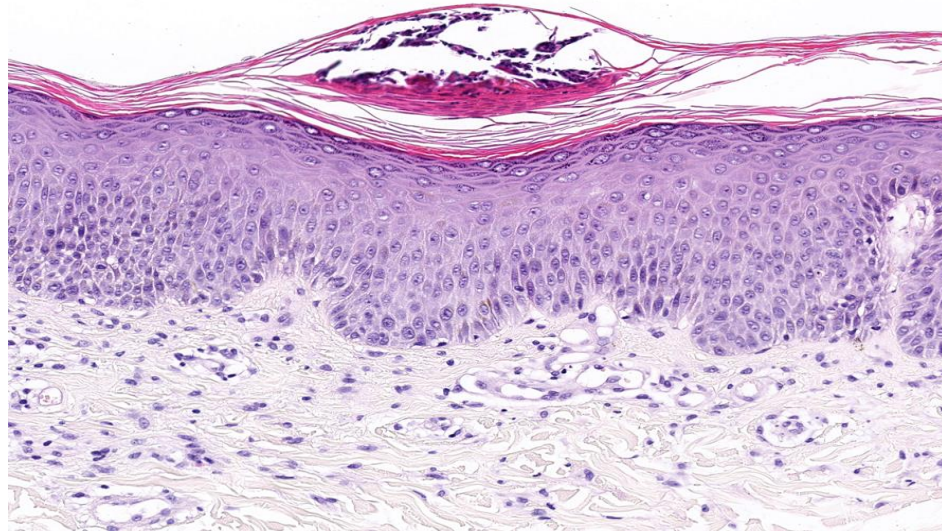
Exclude a fungal infection:
„sandwich sign“





pattern

Patterns are often:
spongiotic or psoriasiform



clue

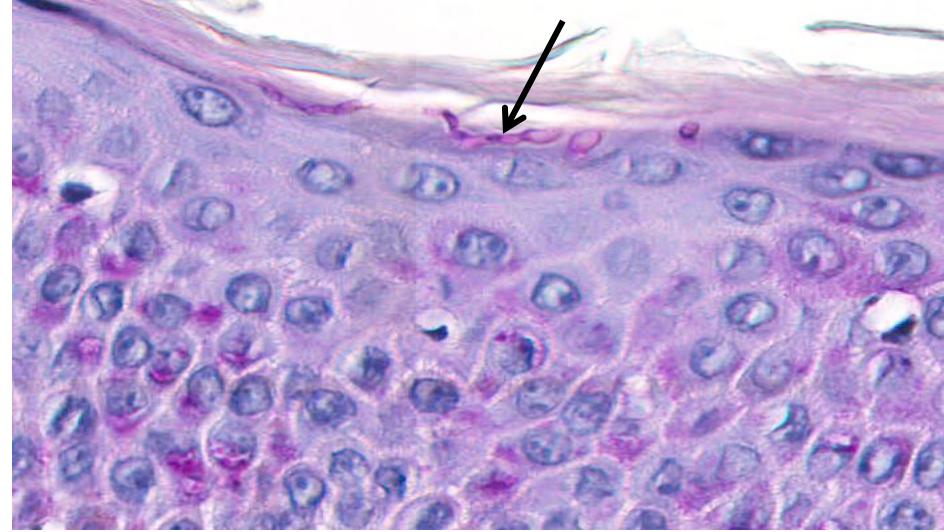
Sandwich-sign:

Two types of keratinization horizontal
and parallel + neutrophils

Tinea corporis

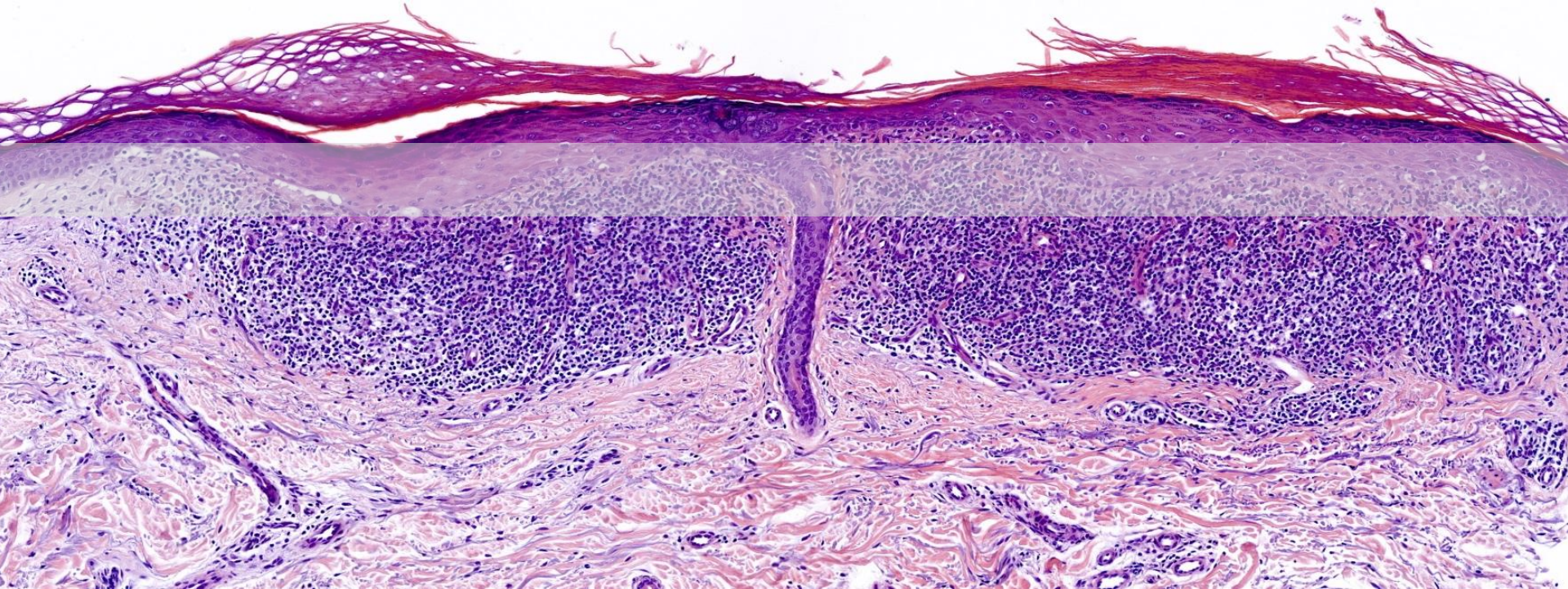
PAS stain:

septated hyphae in the cornified layer



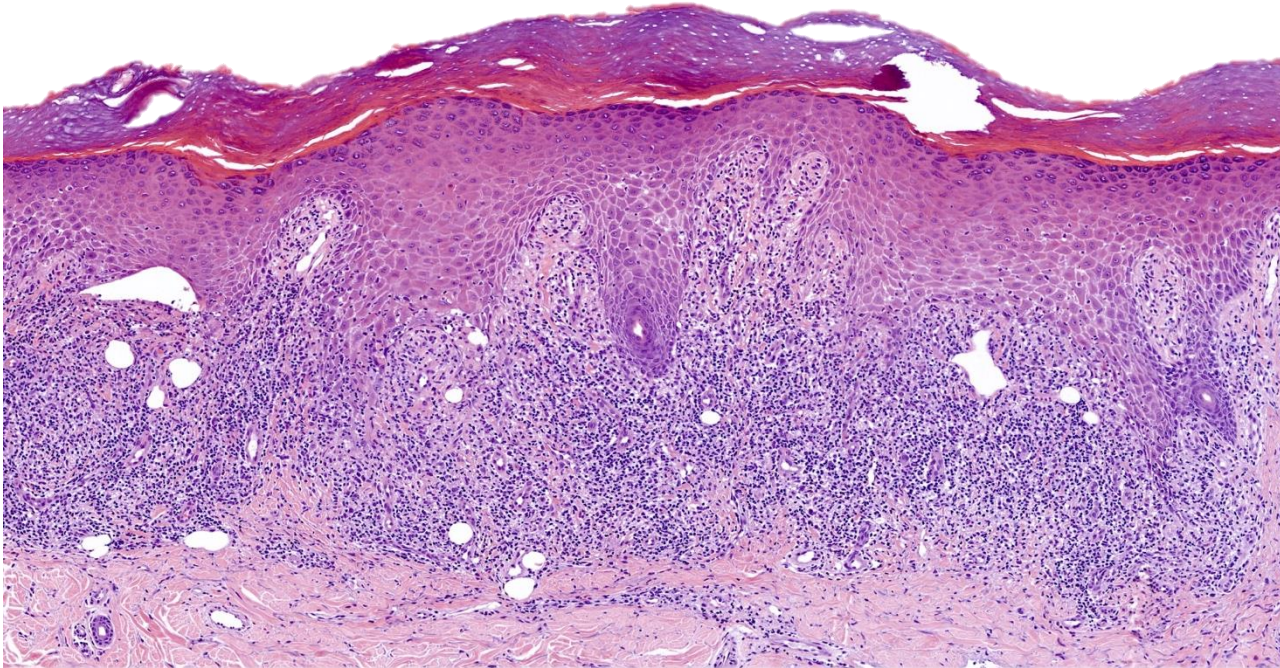
Interface dermatitis

= Immune cells (often lymphocytes) attacks the interface between the epidermis and the upper dermis. Typically with damage of the basal layers of the epidermis.



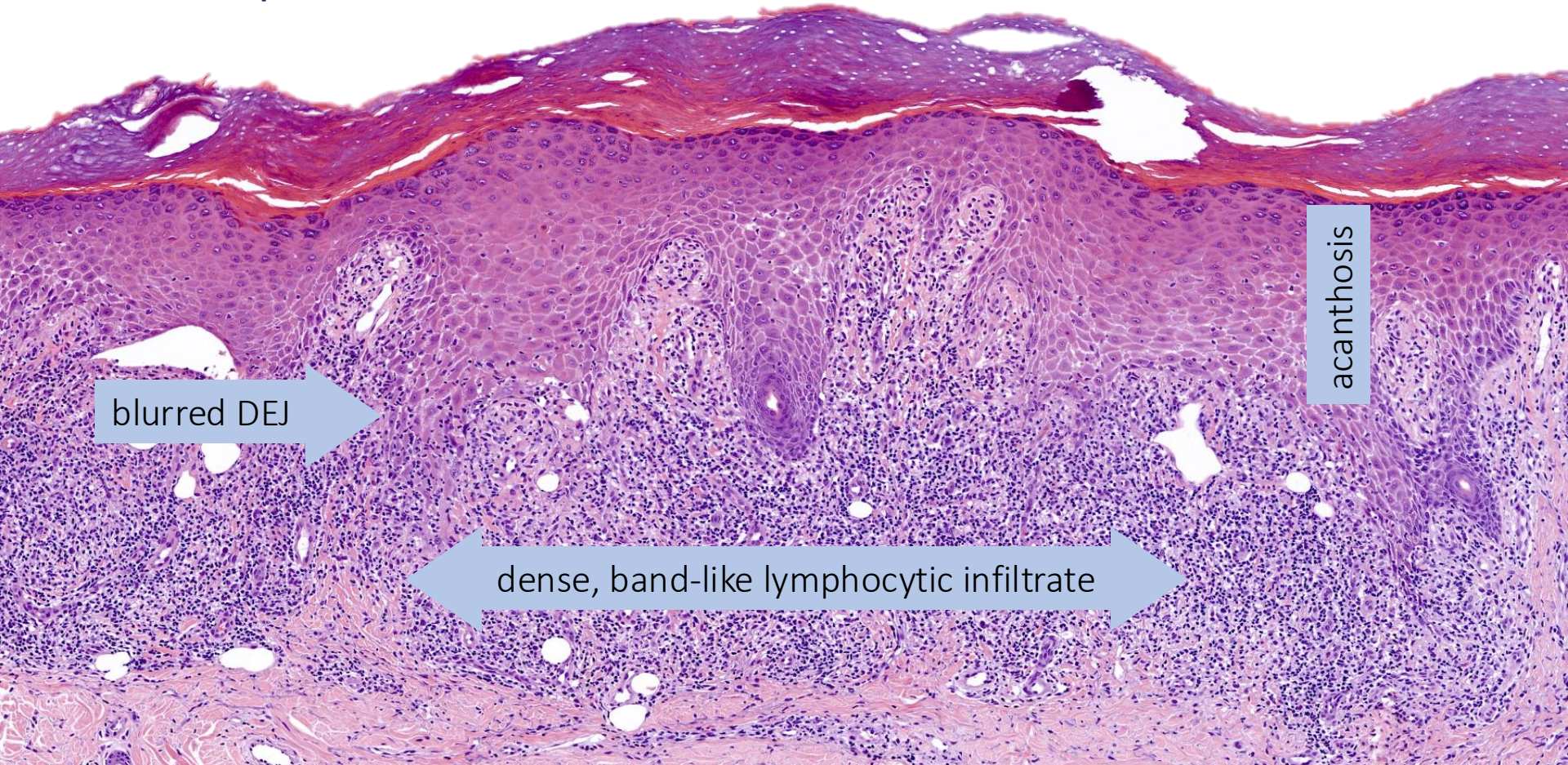
Lichenoid interface dermatitis

= dense band-like infiltrate of lymphocytes in the dermoepidermal junction (DEJ)



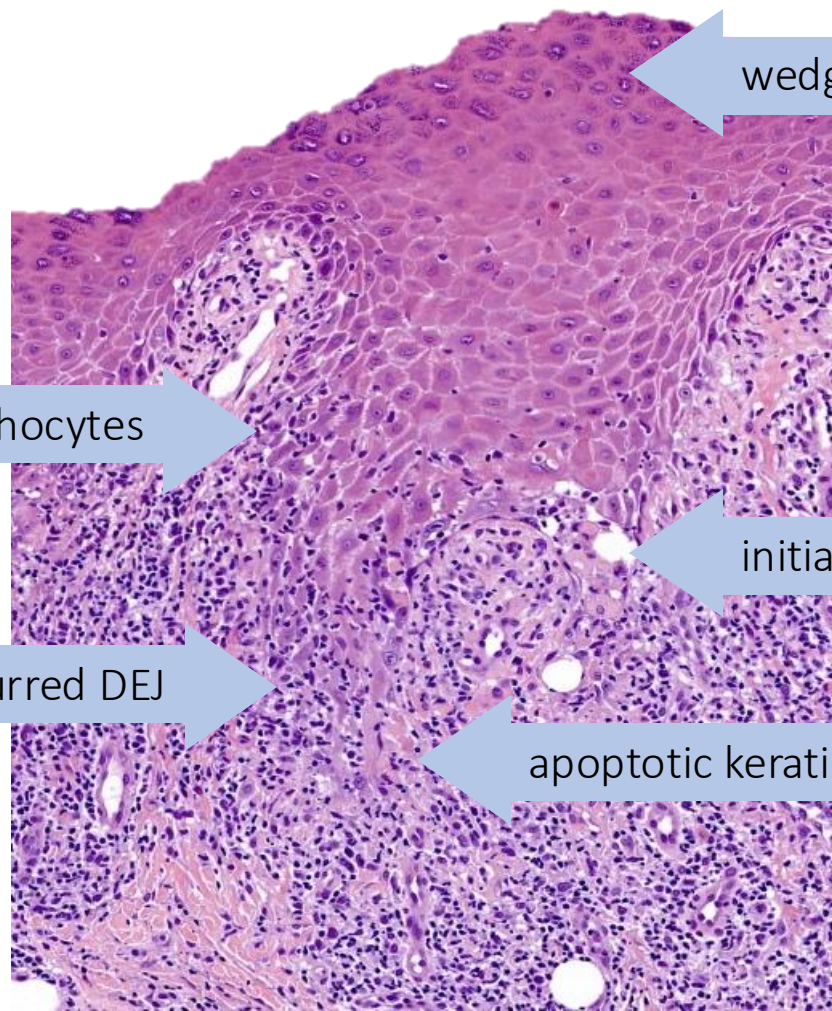
example: Lichen planus

Lichen planus





Lichen planus



wedge-shaped str. granulosum

infiltration of lymphocytes

initial subepidermal blistering

Max-Joseph cleft

blurred DEJ

apoptotic keratinocytes

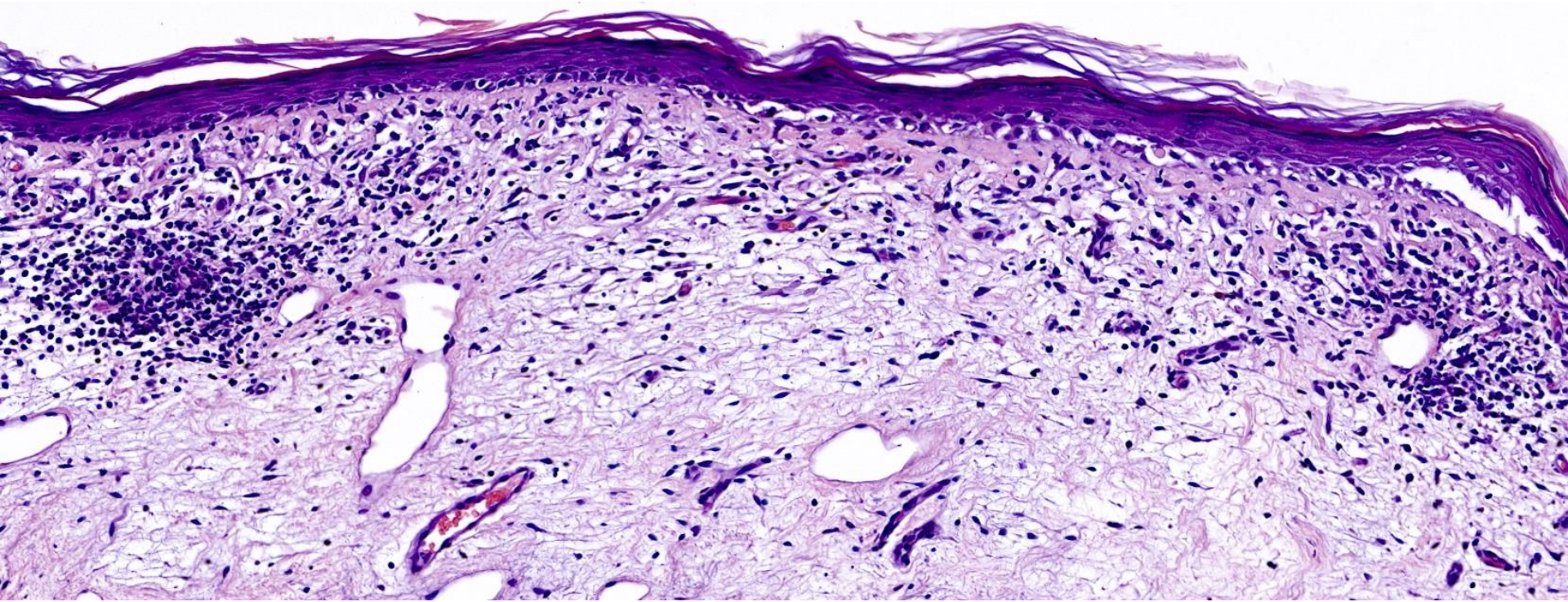
cadaveric keratinocytes

the rete ridges
reminds to saw teeth

Vacuolar interface dermatitis

= vacuolization of the basal layers of the epidermis

pattern

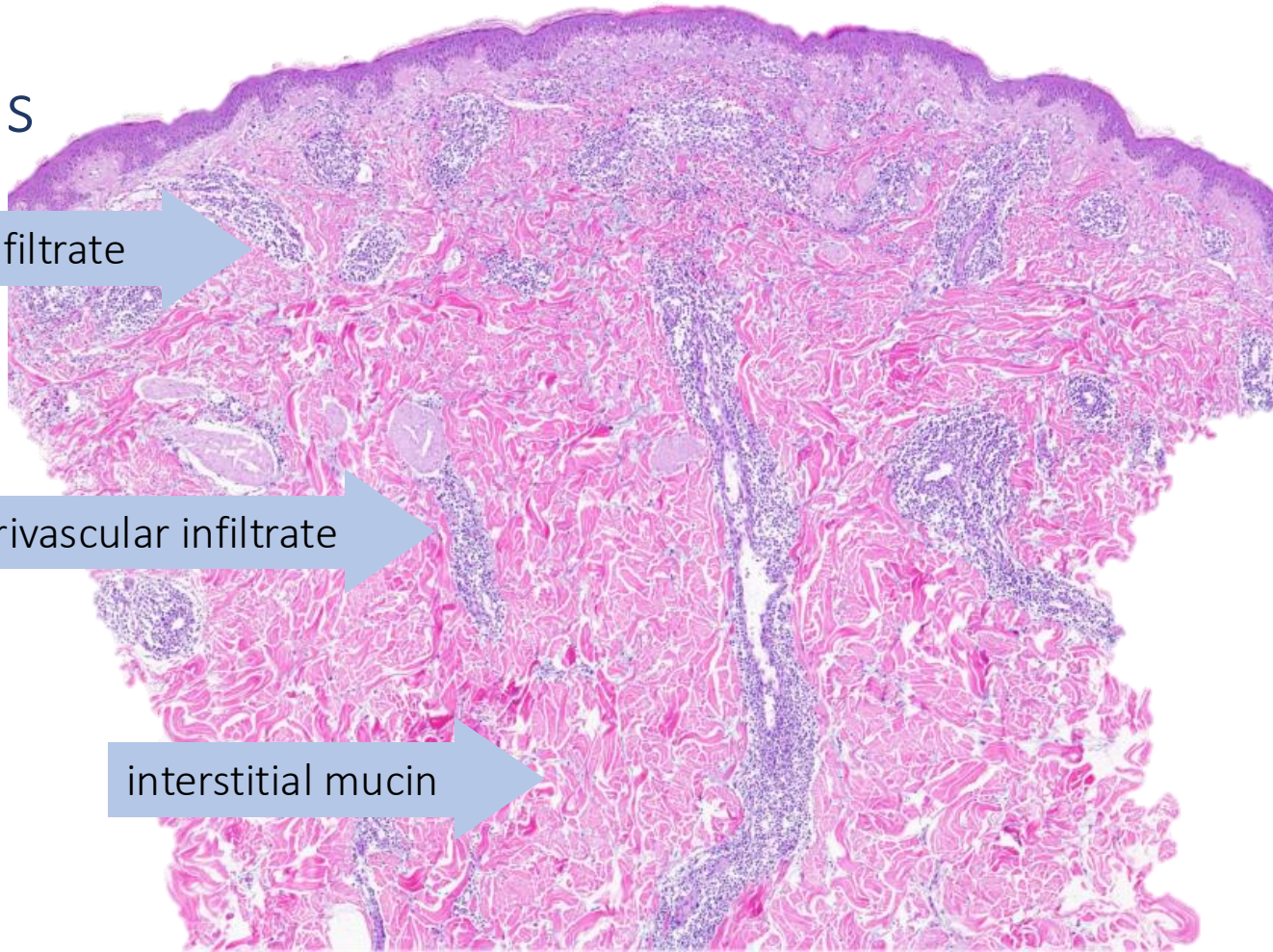


Lupus erythematosus

superficial perivascular infiltrate

deep perivascular infiltrate

interstitial mucin



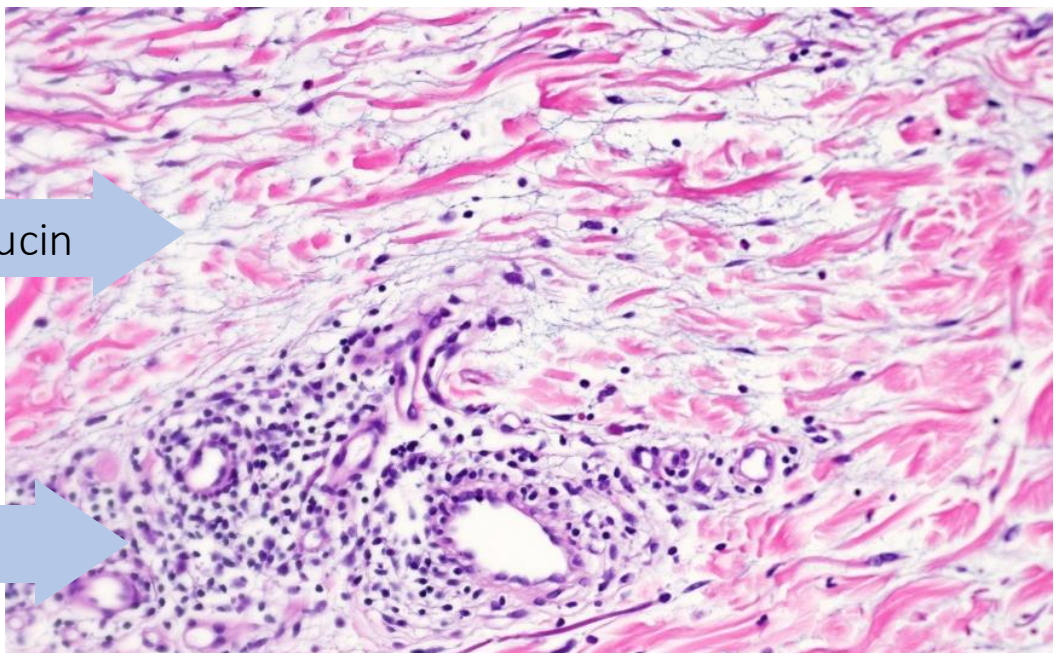
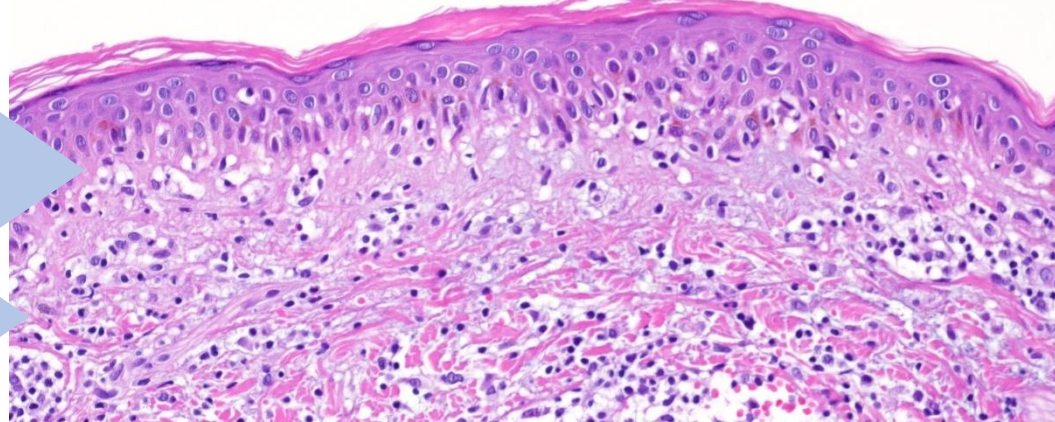
L. erythematosus

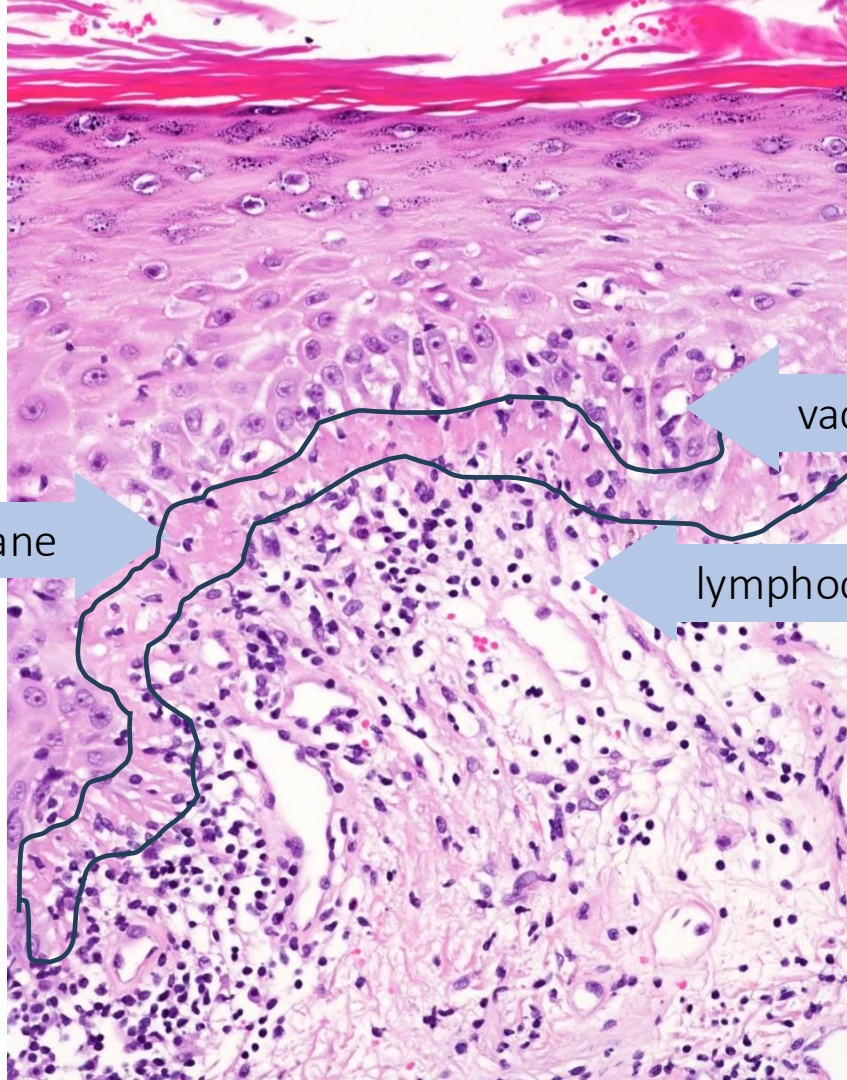
vacuolar alteration

moderate lymphocytic infiltrate

interstitial mucin

perivascular lymphocytic infiltrate





thickened basal membrane

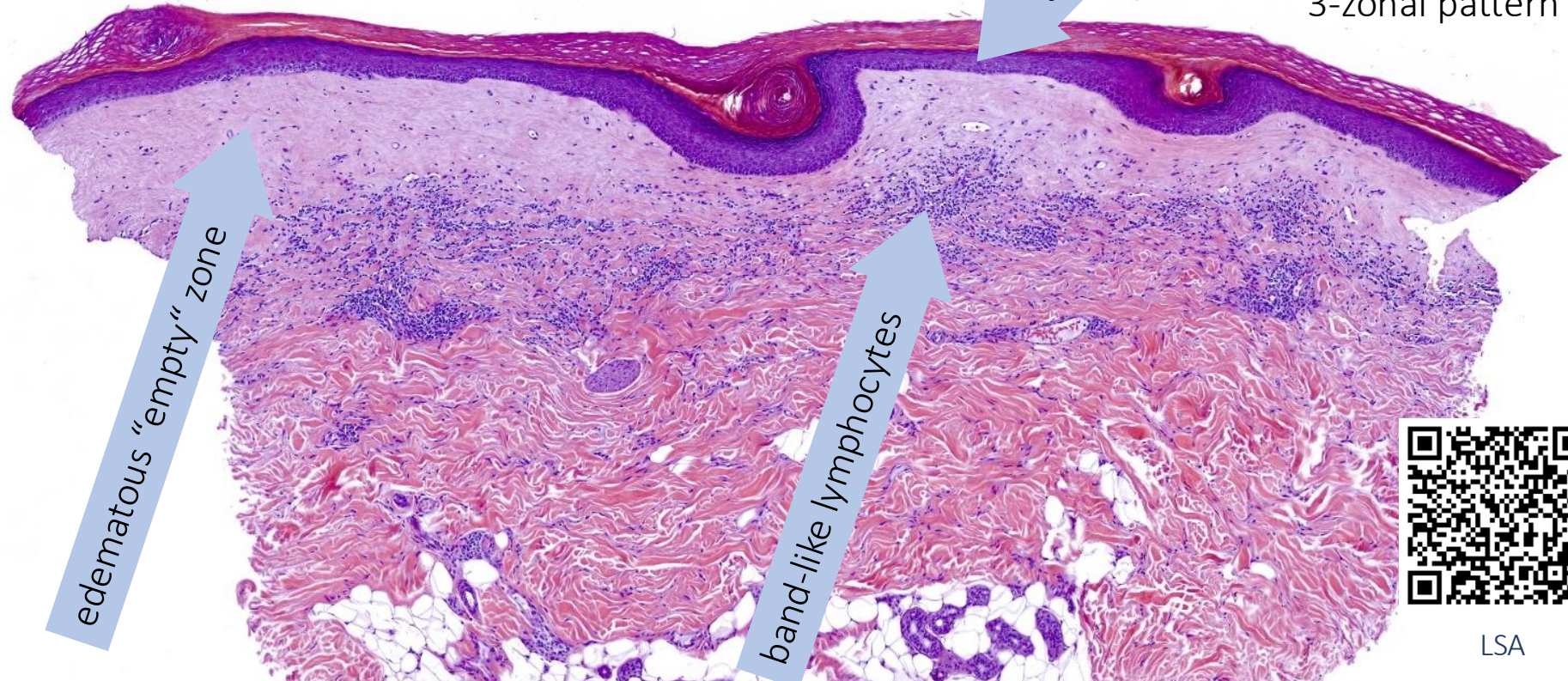
vacuolar alteration

lymphocytes

Lichen sclerosus et atrophicus

clue

3-zonal pattern

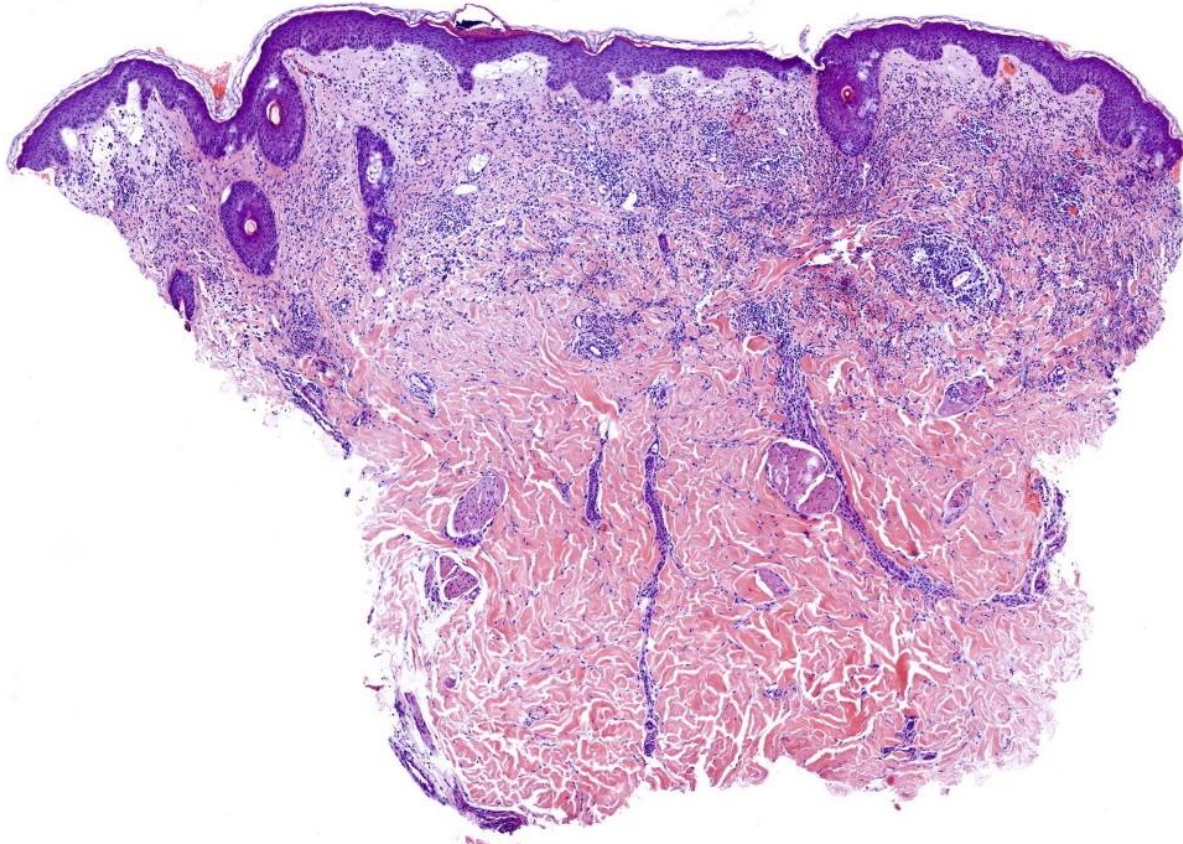


LSA

Interstitial dermatitis

= dermal infiltrates between the collagen bundles

pattern



example: Sweet syndrome

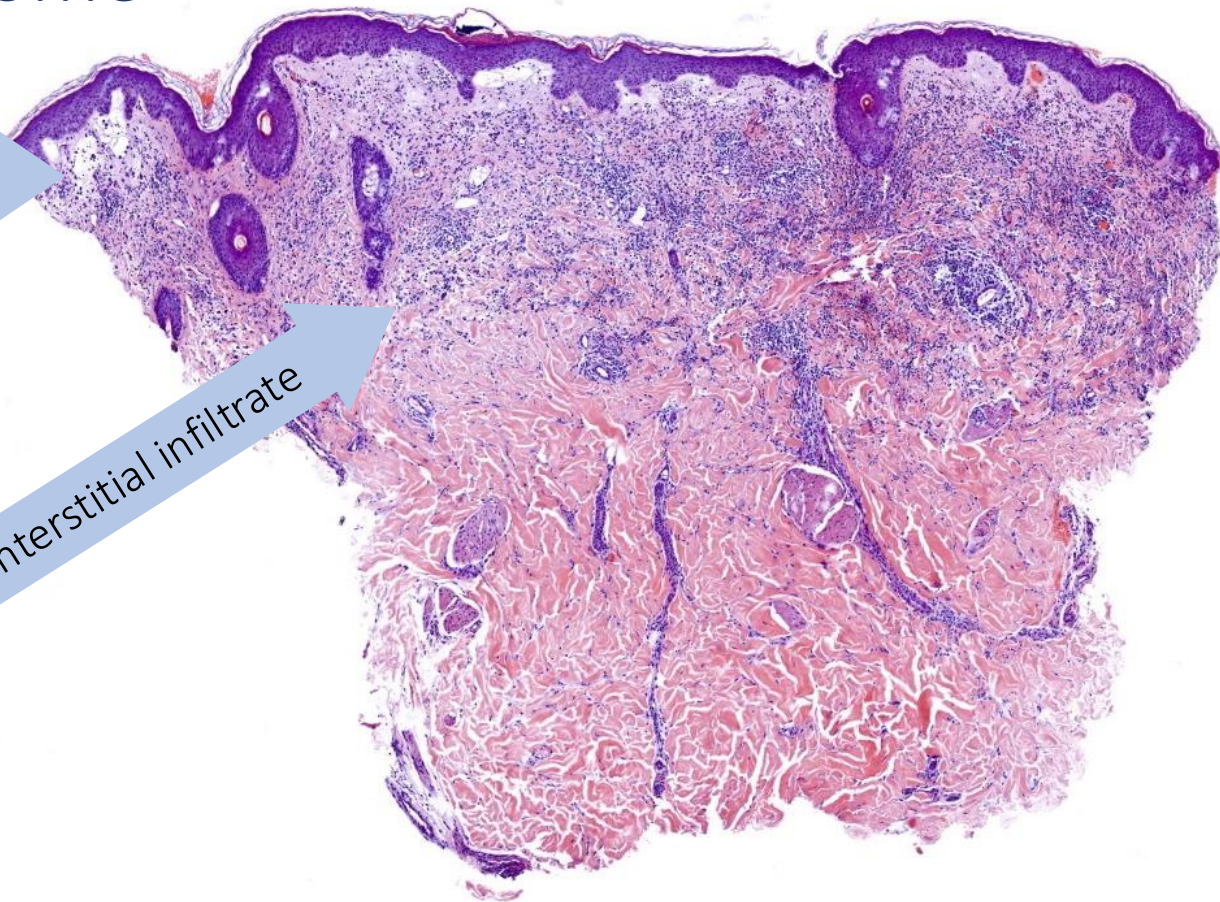
Sweet syndrome

papillary edema

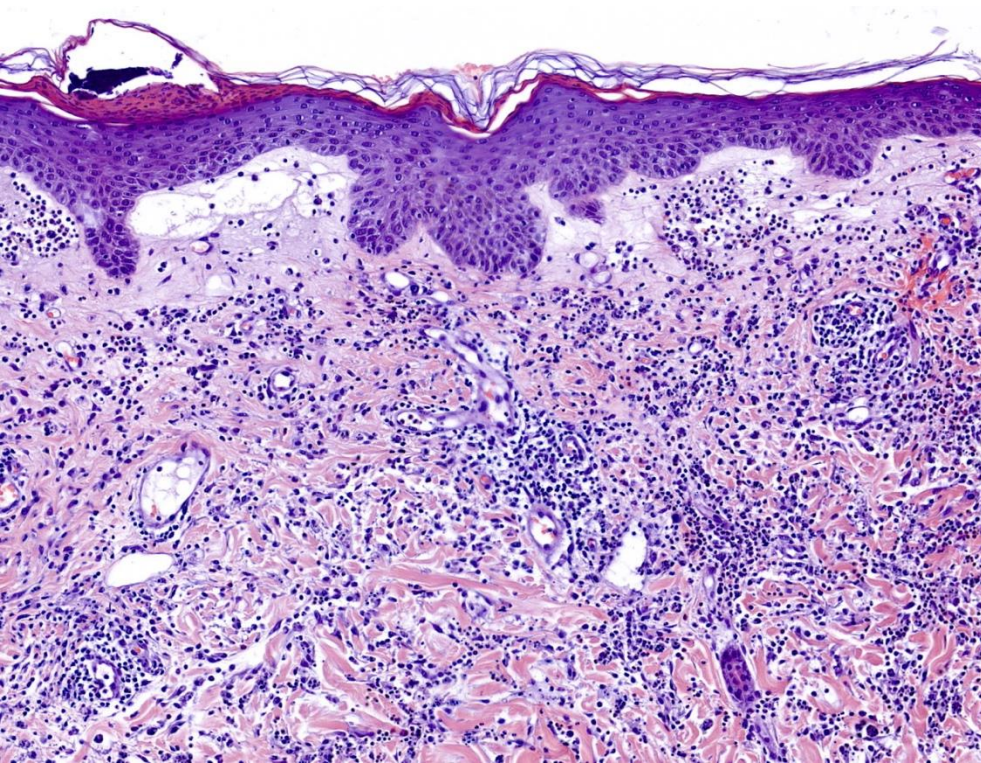
interstitial infiltrate



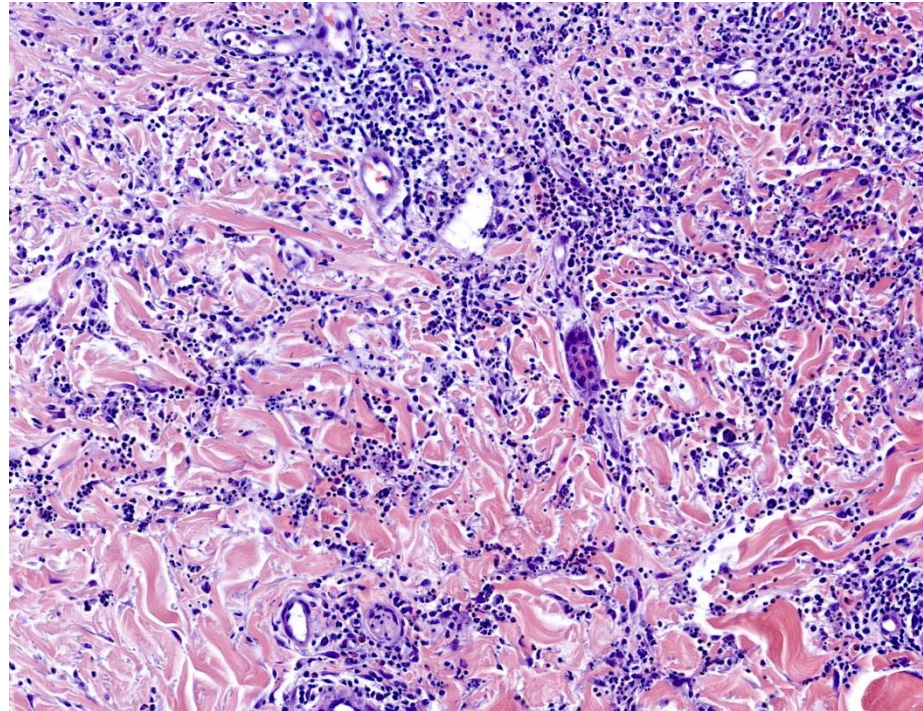
Sweet syndrome



Sweet syndrome



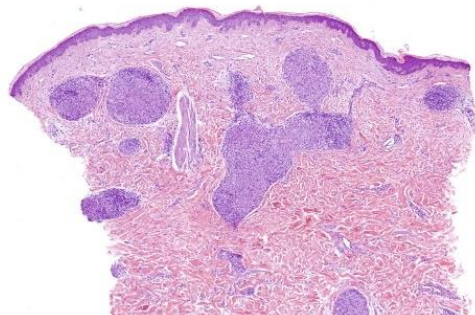
papillary edema



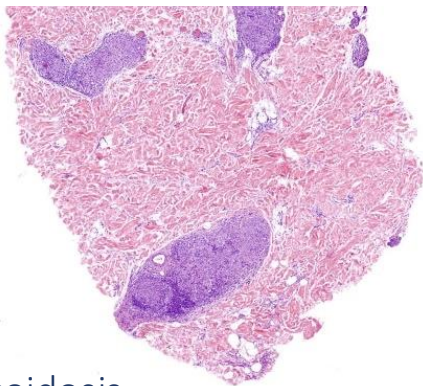
interstitial neutrophils

Nodular dermal infiltrate

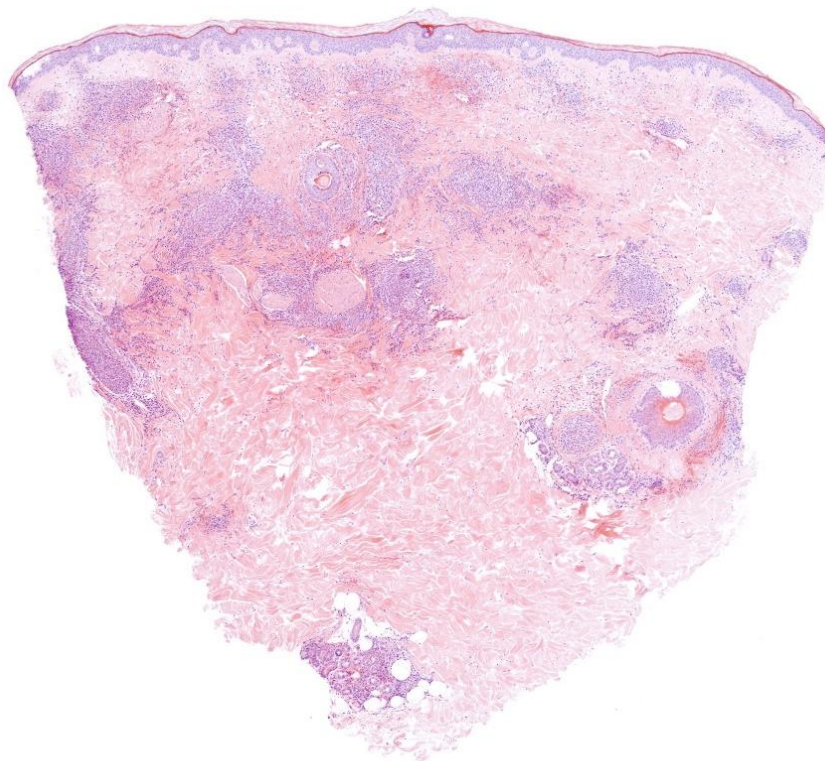
pattern



granulomatous dermatitis



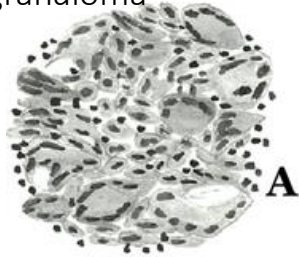
example: sarcoidosis



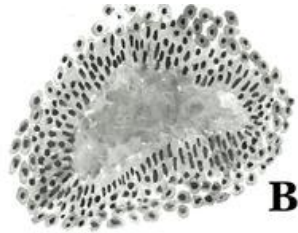
example: vasculitis

Different types of granuloma

foreign body
granuloma



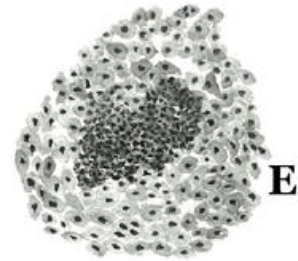
palisaded granuloma



xanthogranuloma



sarcoidal granuloma



suppurative granuloma

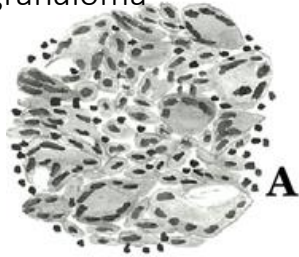


tuberculoid granuloma

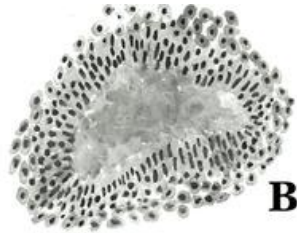
Fig. from: A. Fernandez-Flores and JL Rodriguez-Peralto. Messy granuloma: an additional pattern of granulomatous reaction. Roman J Morphol Embryol 2016; 57(1): 51-57

Different types of granuloma

foreign body
granuloma



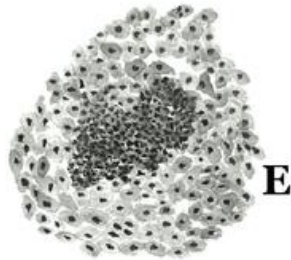
palisaded granuloma



xanthogranuloma



sarcoidal granuloma



suppurative granuloma



tuberculoid granuloma

Fig. from: A. Fernandez-Flores and JL Rodriguez-Peralto. Messy granuloma: an additional pattern of granulomatous reaction. Roman J Morphol Embryol 2016; 57(1): 51-57

Sarcoidosis



Sarcoidosis

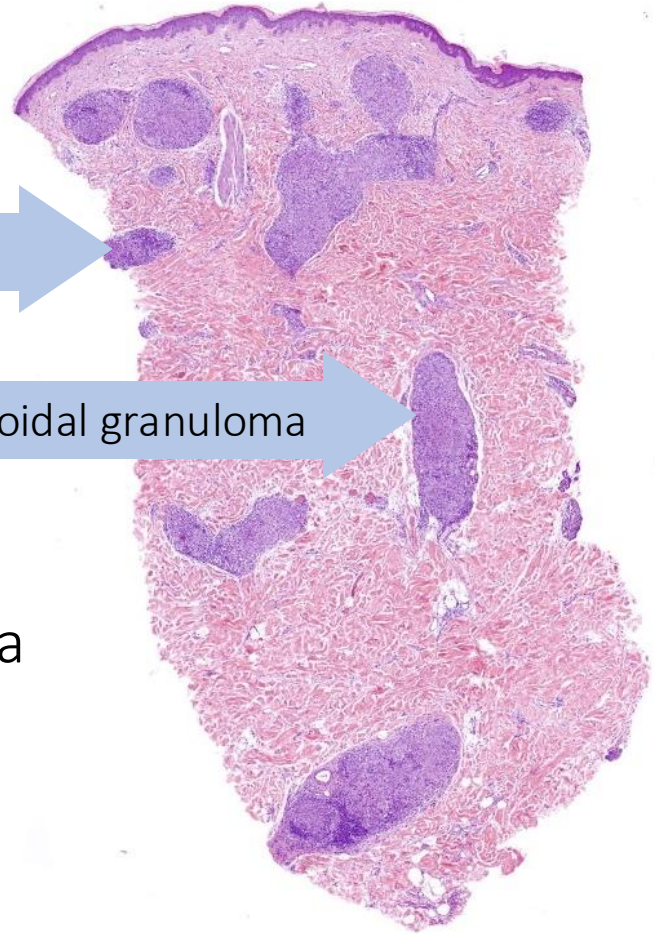


nodular dermal infiltrate

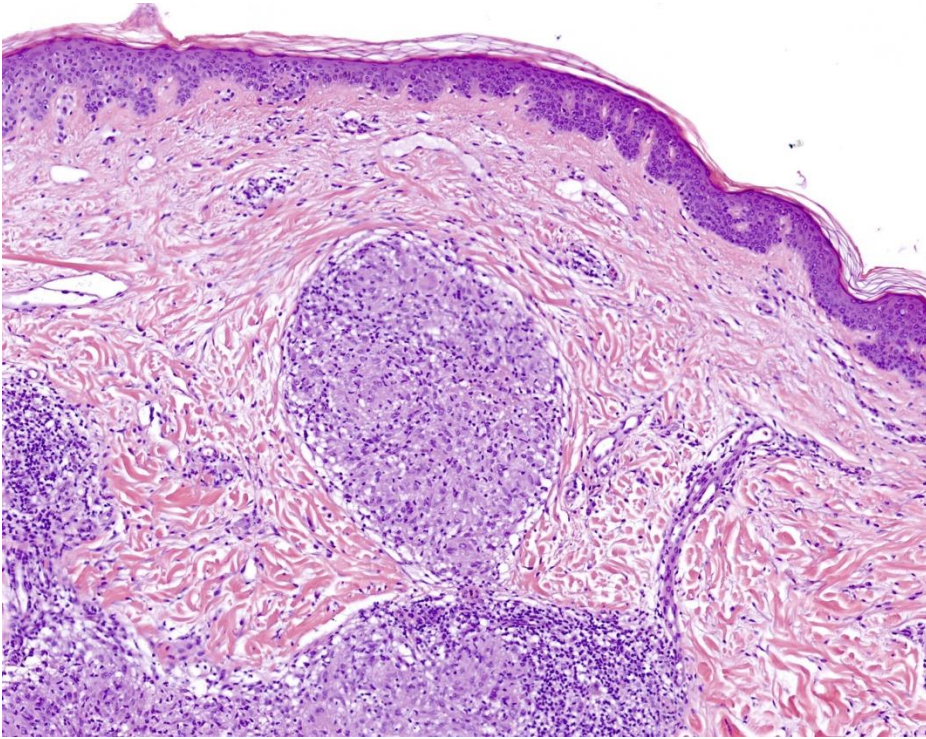
sarcoidal granuloma

sarcoidal granuloma

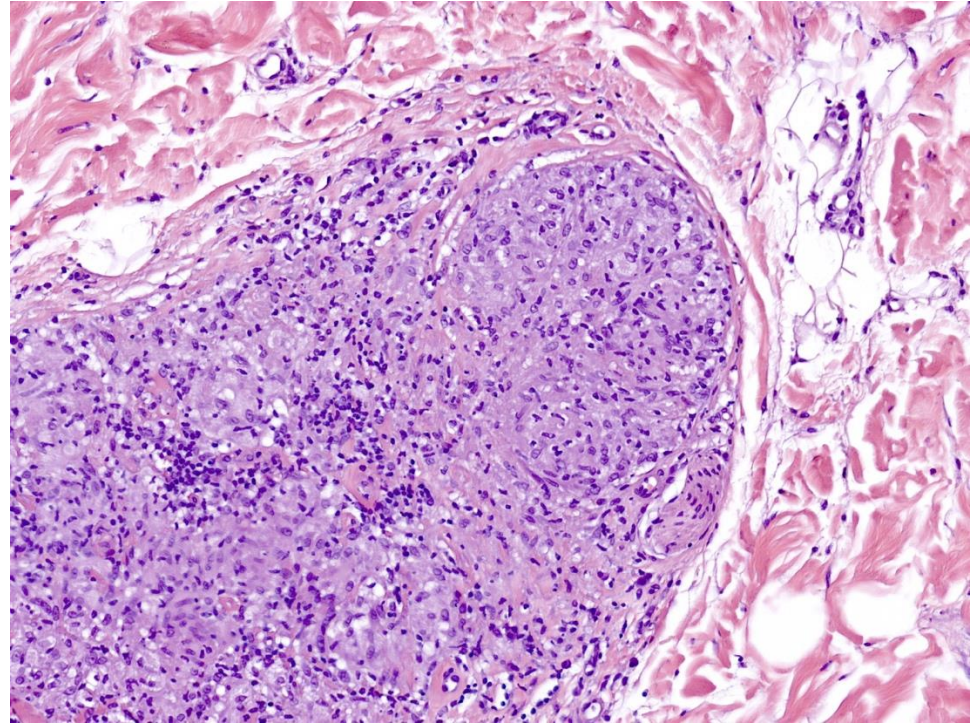
- Densely packed epithelioid cells with little or no surrounding lymphocytic infiltrate
- No pronounced lymphocyte ring ("naked")



Sarcoidosis



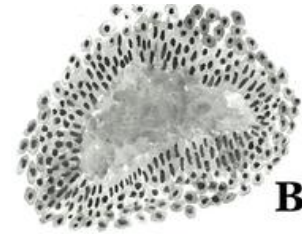
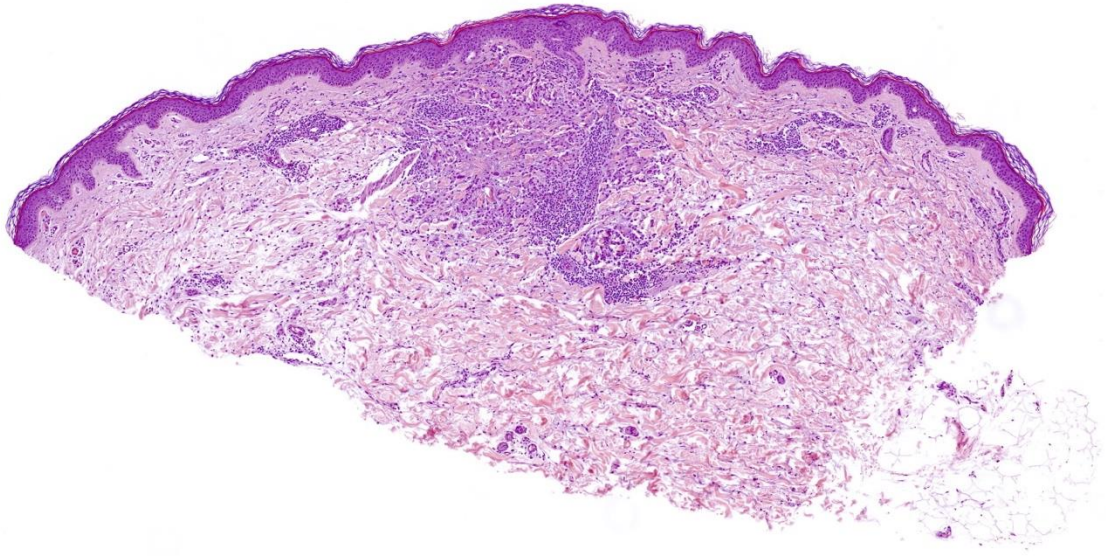
„naked“ granuloma



epithelioid histiocytes

Granuloma annulare

pattern



palisaded granuloma

- Epithelioid cells (or giant cells) arranged in columns (palisading)
- Cells form a “fence-like” structure
- Often around a central necrosis / necrobiosis

Granuloma annulare

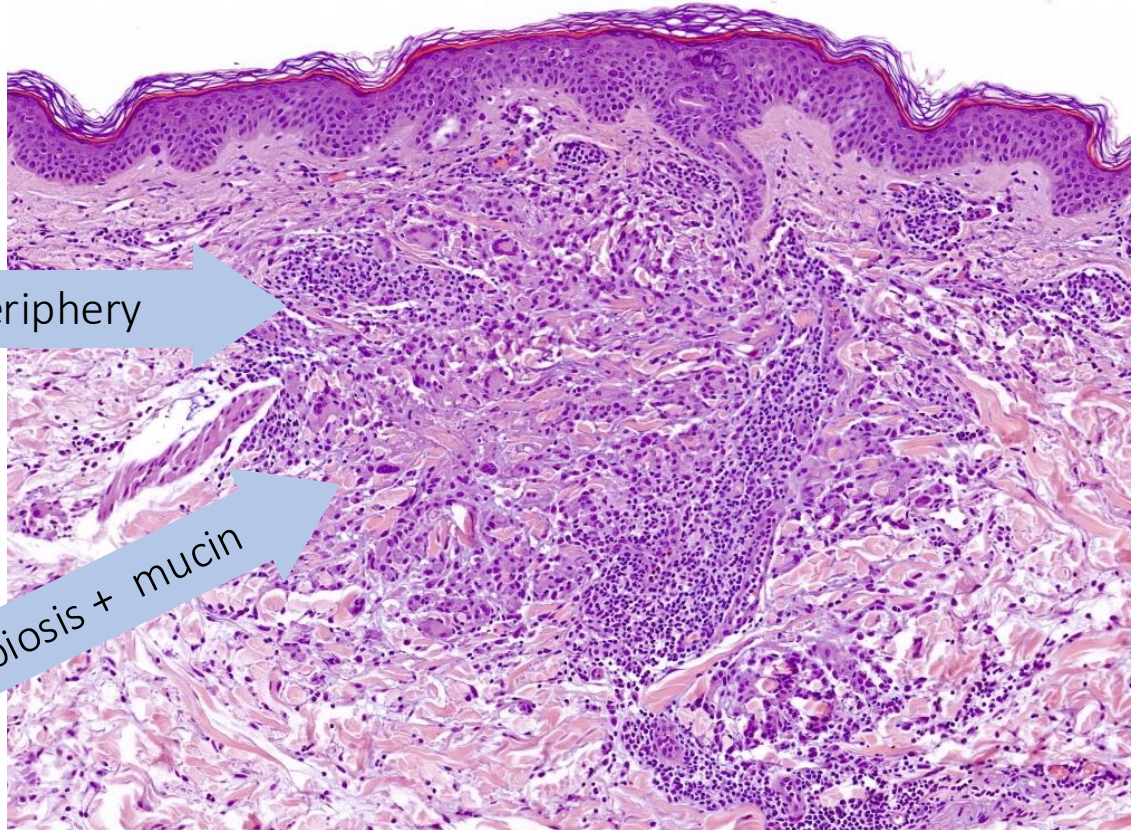
= palisaded granuloma

lympho-histiocytic infiltrate in the periphery



Granuloma annulare

necrobiosis + mucin



Granuloma annulare

= palisaded granuloma

palisaded granuloma

Center:
necrobiosis + mucin

Periphery:
lympho-histiocytic infiltrate



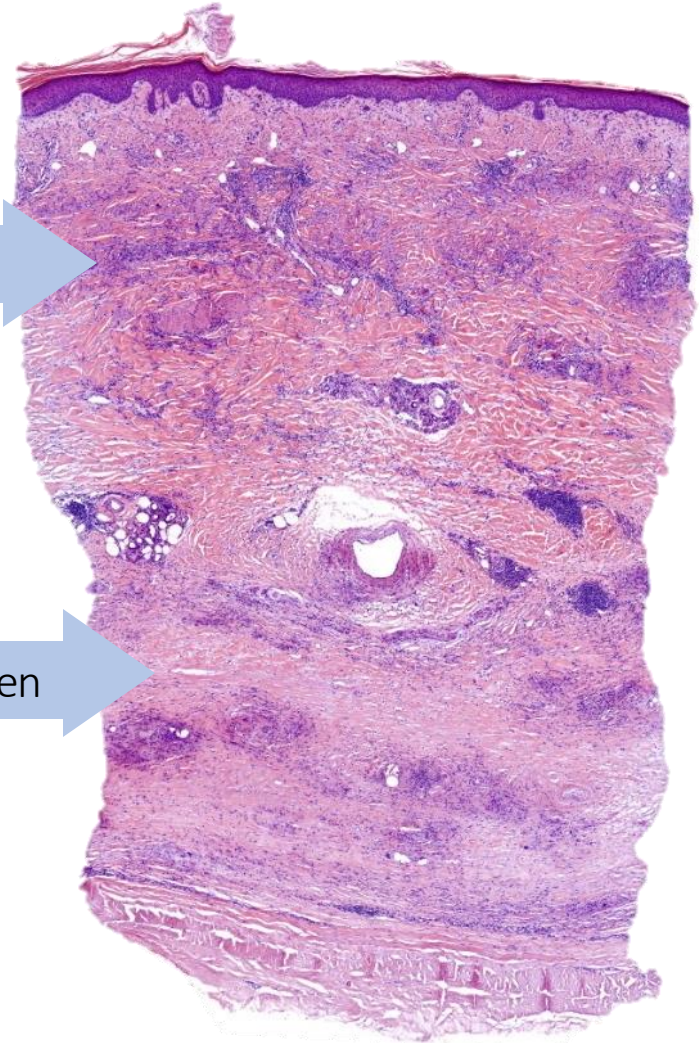
Necrobiosis lipoidica

lympho-histiocytic infiltrate

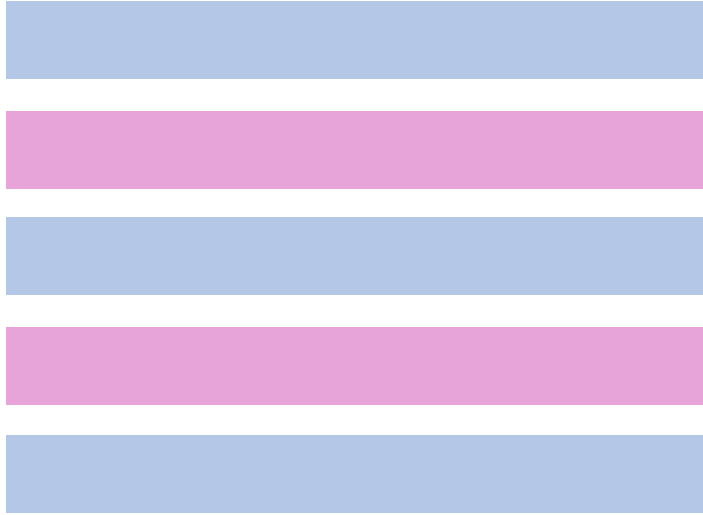


Necrobiosis lipoidica

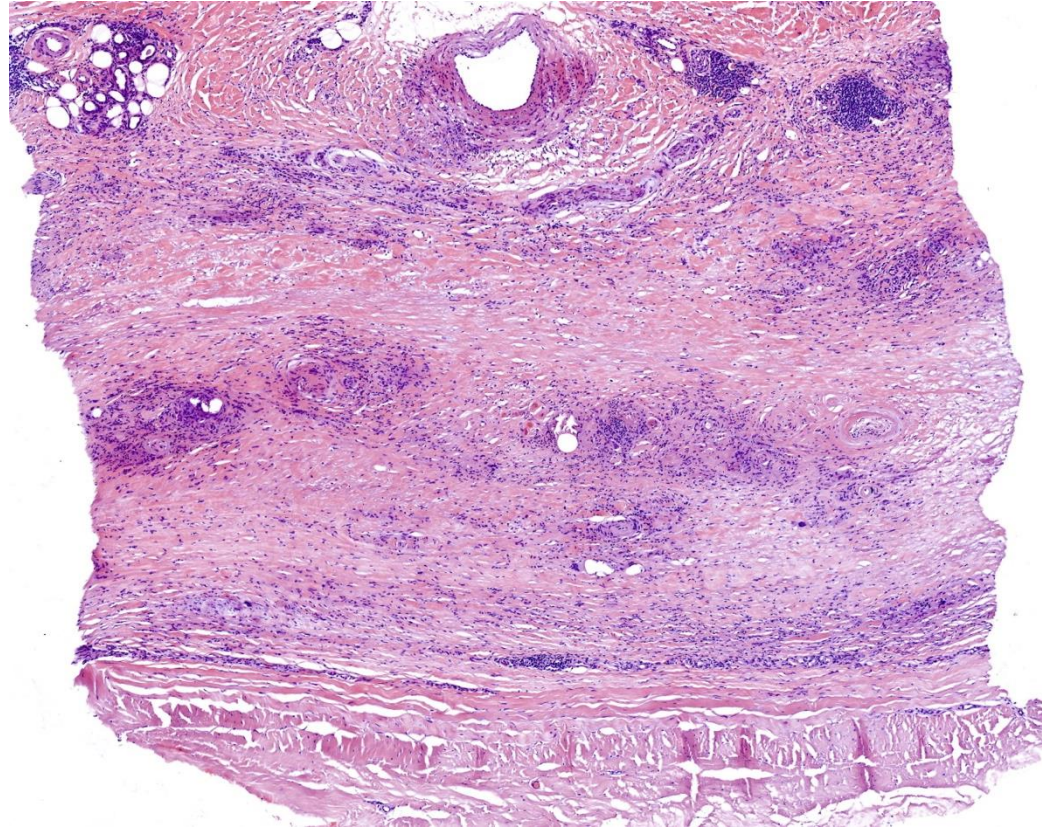
sclerotic collagen



Necrobiosis lipoidica



“sandwich-like” alternation

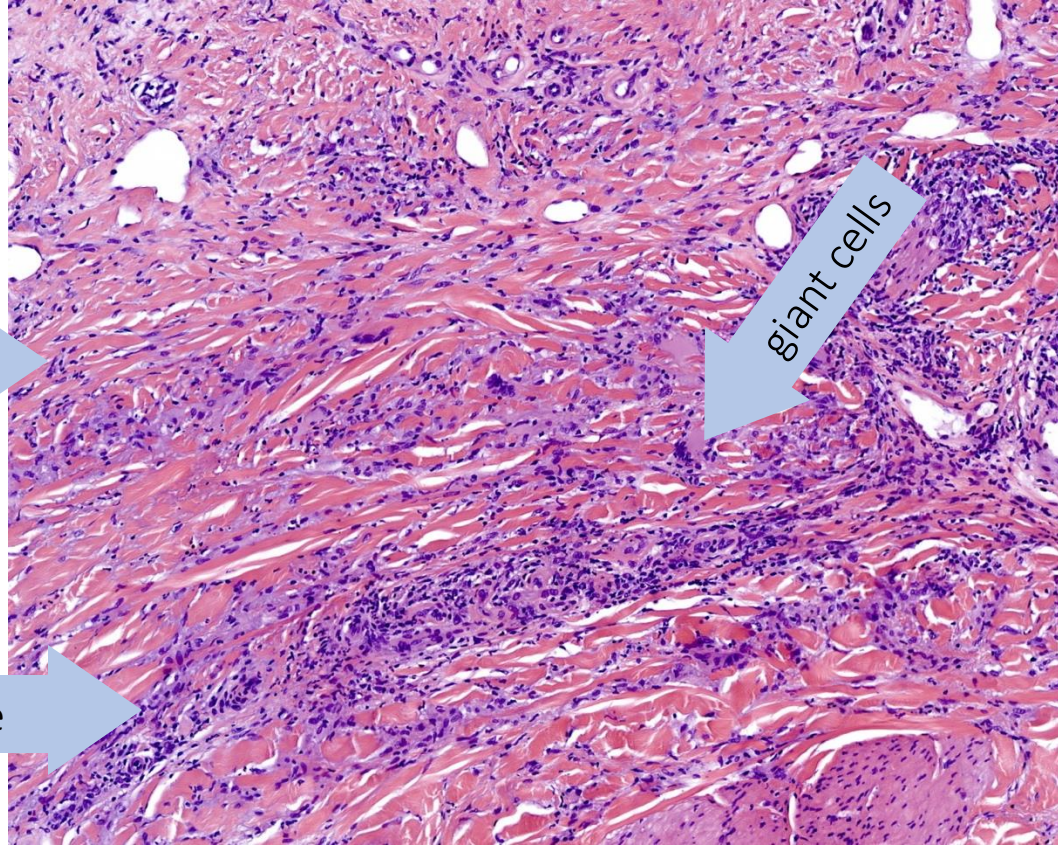


Necrobiosis lipoidica

sclerotic collagen

giant cells

lympho-histiocytic infiltrate



Leukocytoclastic vasculitis

superficial perivascular infiltrate

erythrocyte extravasate



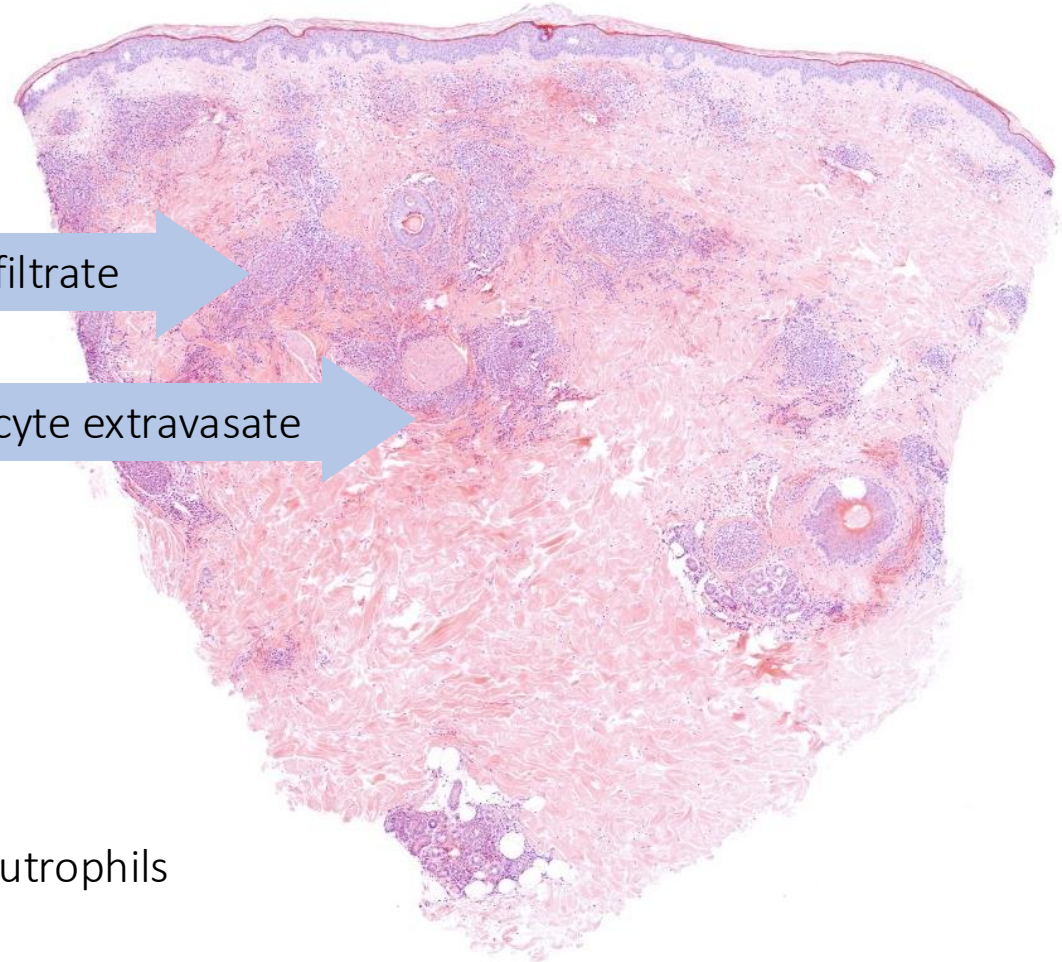
Pattern:

→ nodular

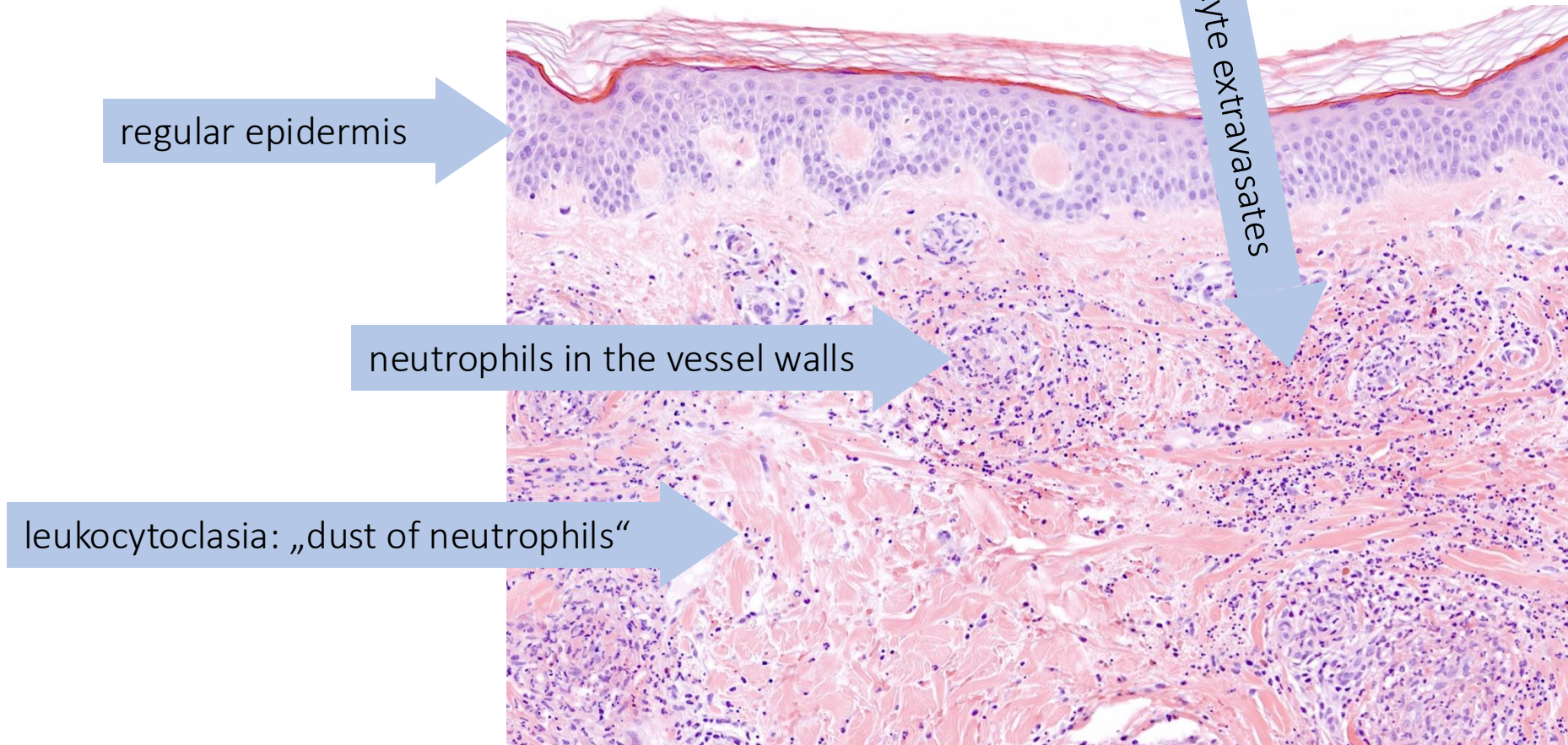
→ + vasculitis

→ + neutrophils

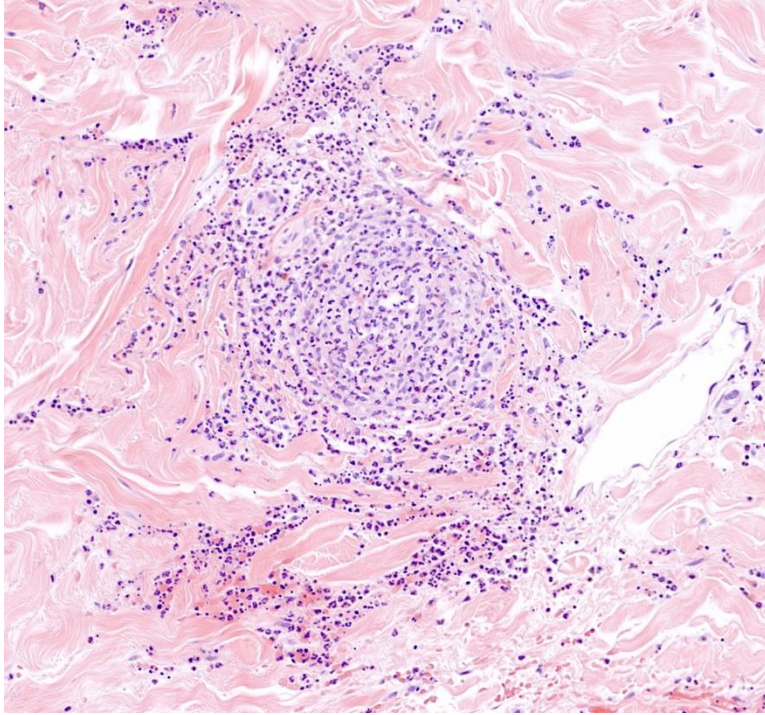
Leukocytoclastic vasculitis



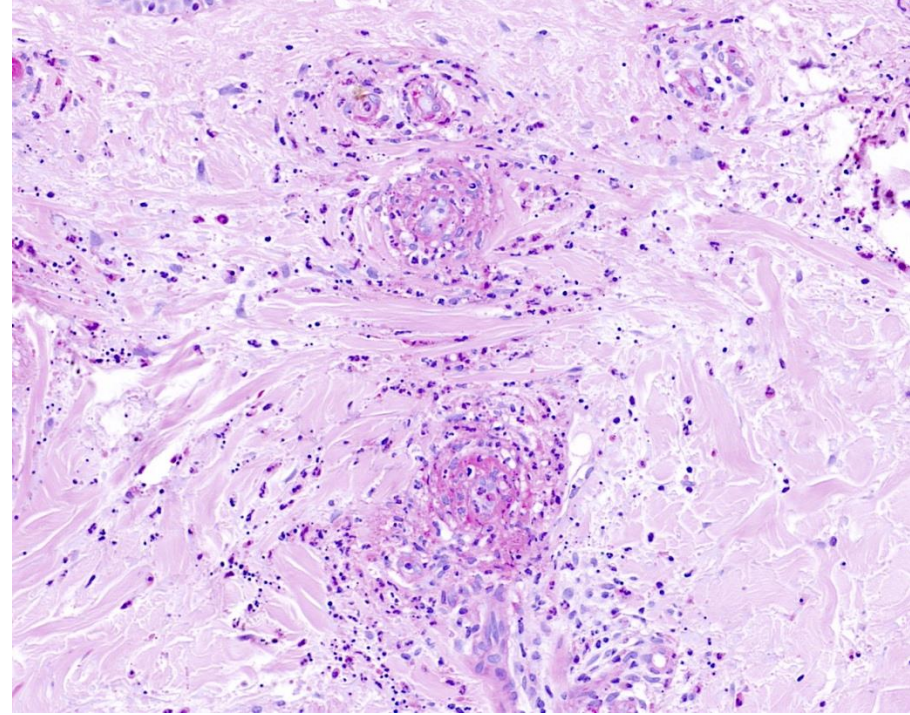
Leukocytoclastic vasculitis



Leukocytoclastic vasculitis



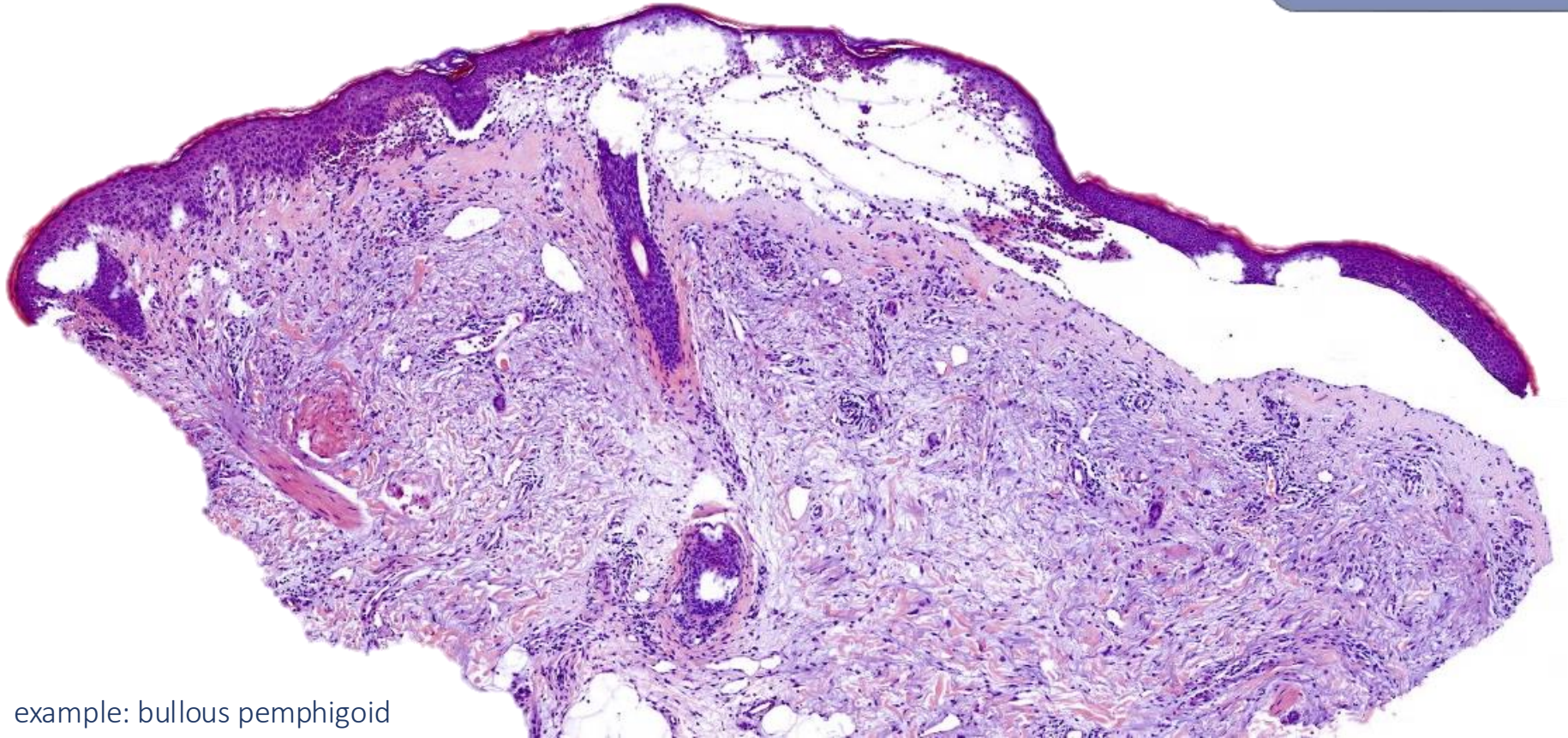
neutrophils + leukocytoclasia



PAS: fibrin deposits in the vessel walls

Subepidermal clefting

pattern

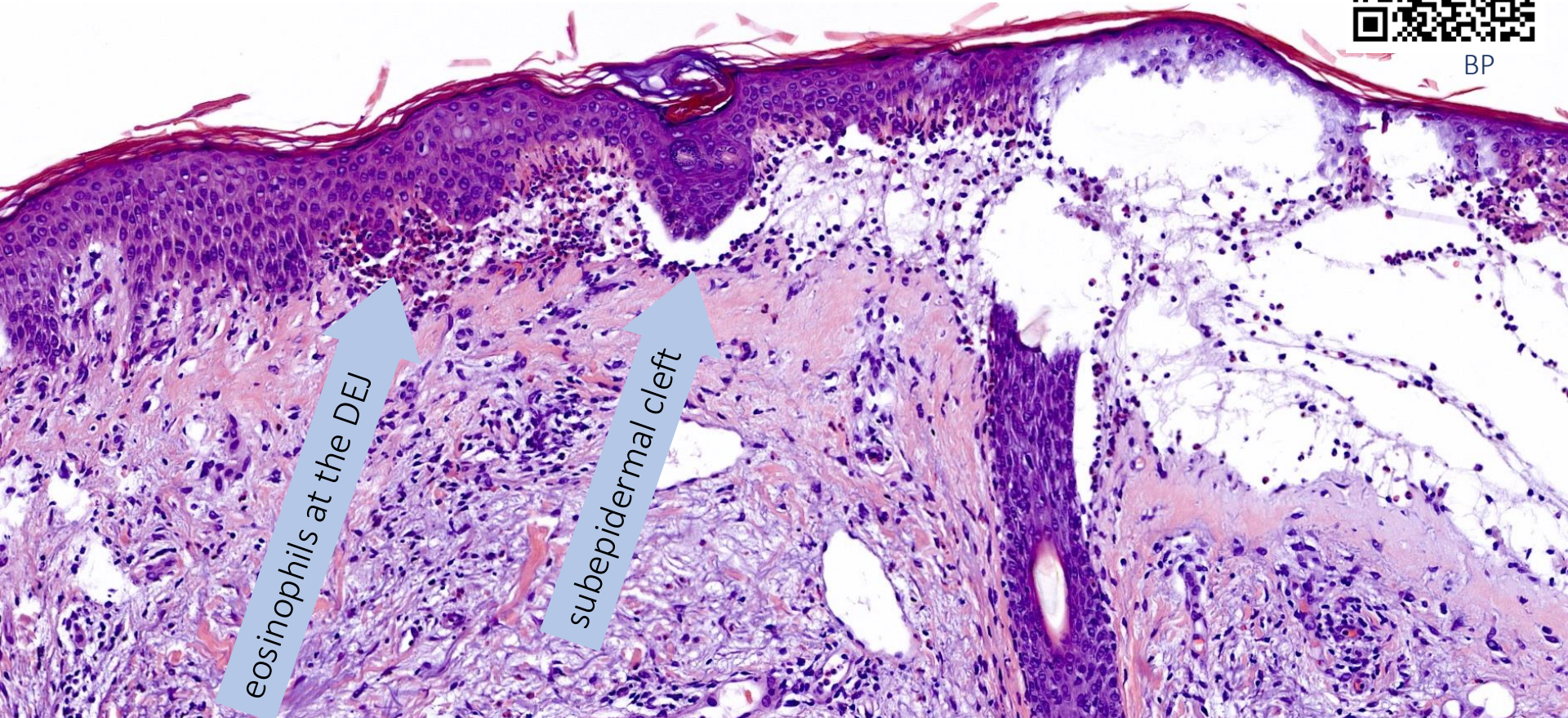


example: bullous pemphigoid

Bullous pemphigoid



BP



eosinophils at the DEJ

subepidermal cleft



<https://adh.smartzoom.com/s8738/>

Password: rom25

Thank you!

christina.mitteldorf@med.uni-goettingen.de