SKIN LESIONS AS A CLUE TO DIAGNOSIS OF SYSTEMIC DISEASE

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Operational Programme Research,
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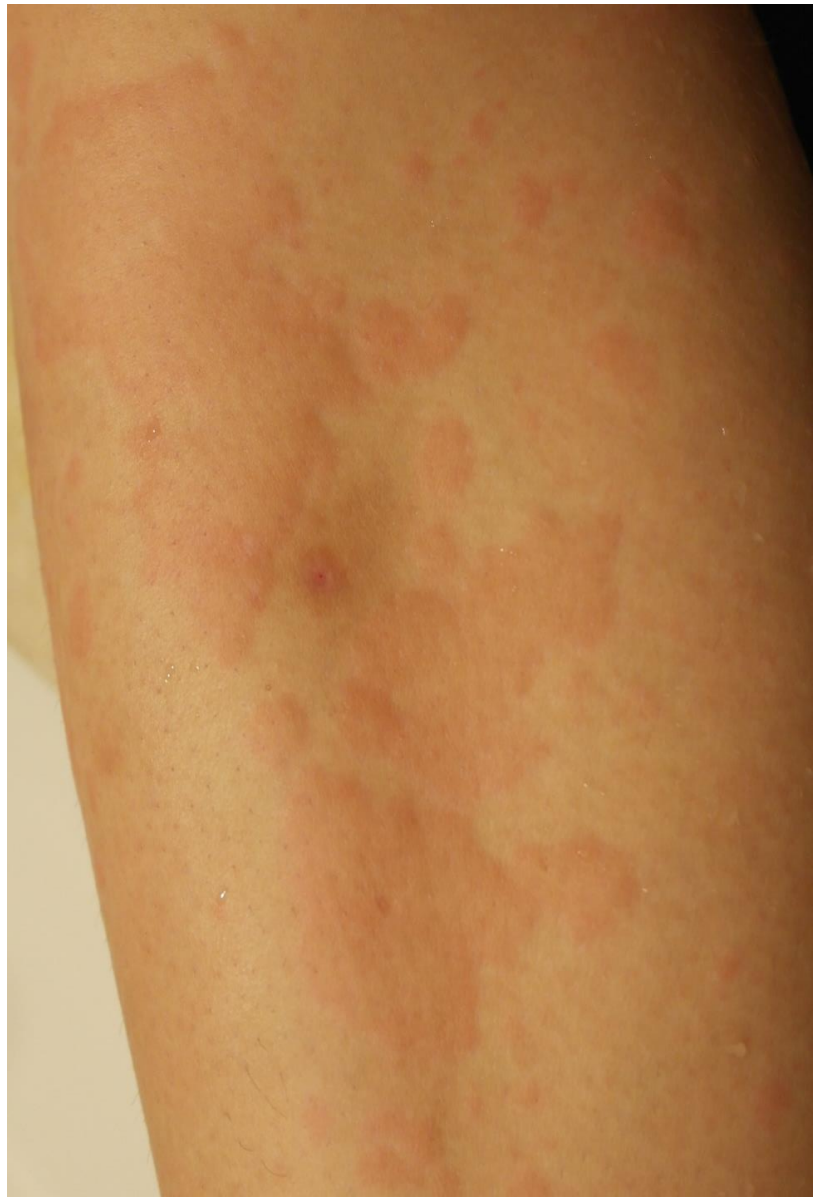
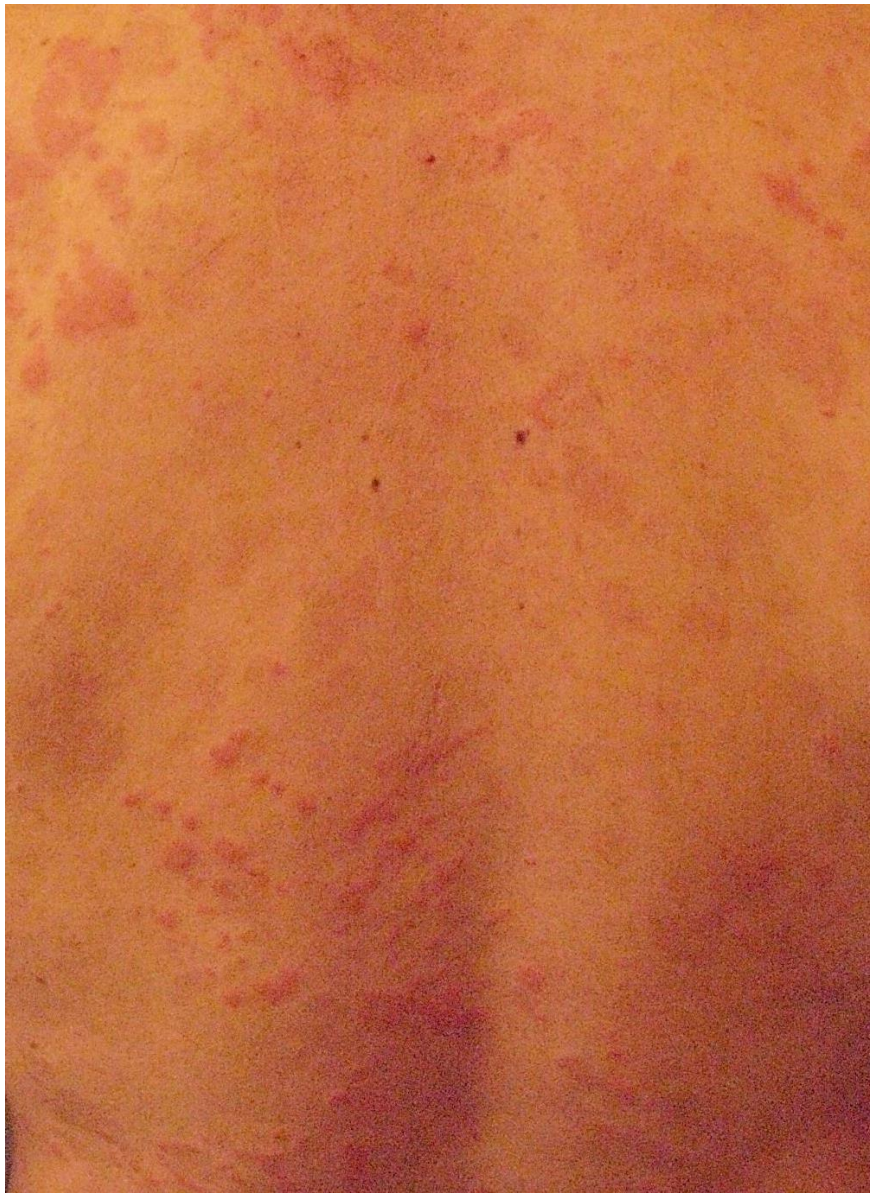
MINISTRY OF EDUCATION,
YOUTH AND SPORTS





URTICARIA

URTICA – POMPHUS

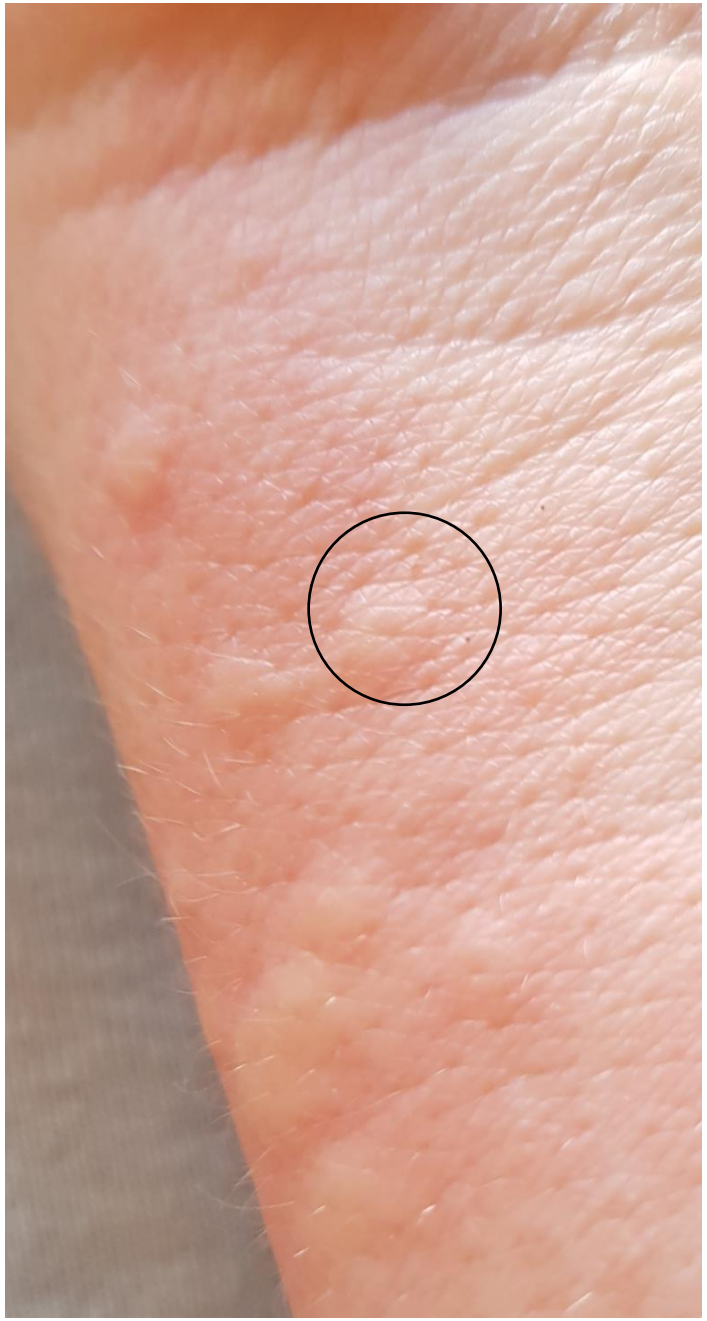
- 1 lesion lasts less than 24 hours
- Usually is itchy
- Might be associated with

  - angioedema (10% in children)

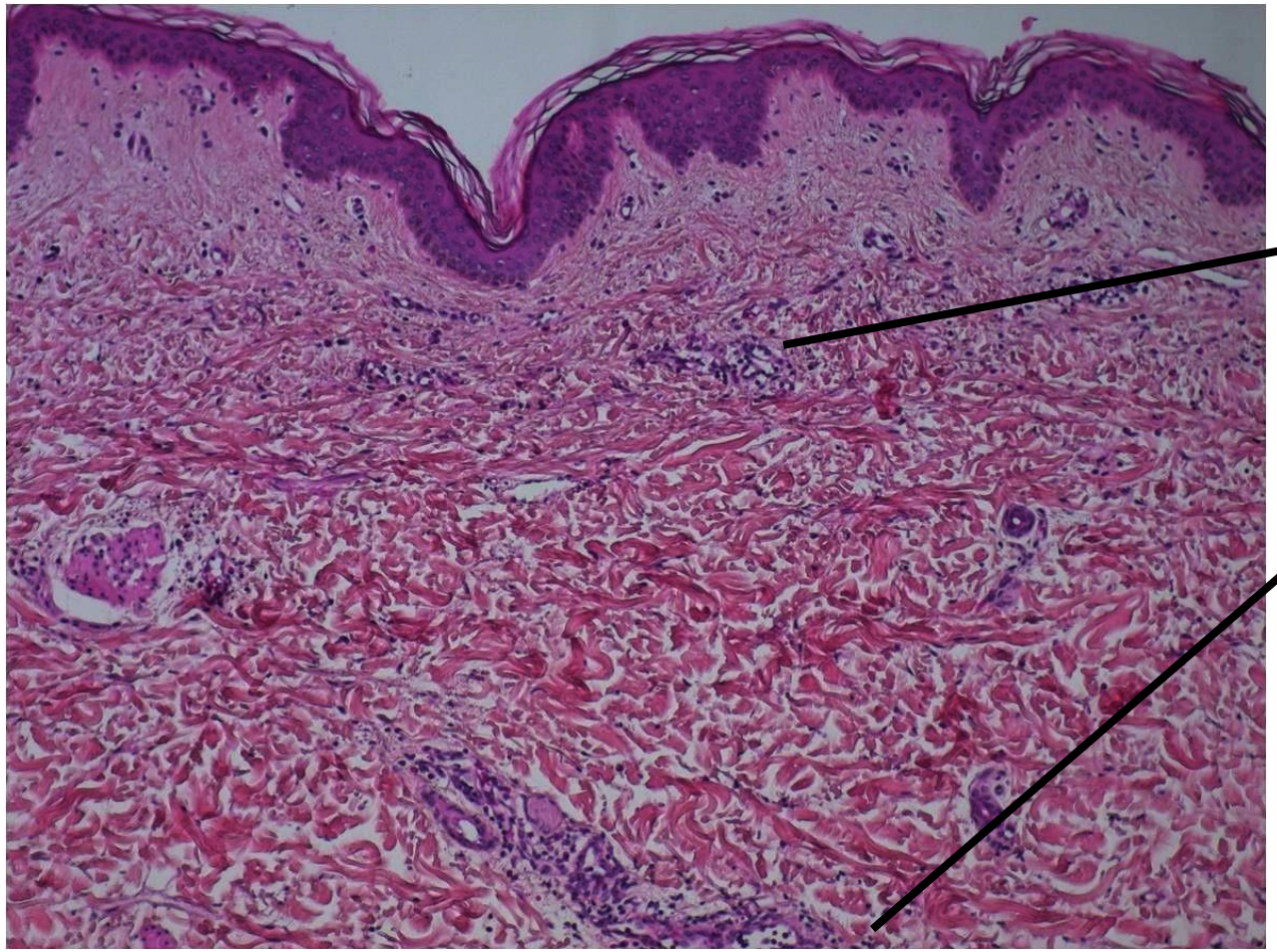
  (pale, painful, lasts 2-3d)

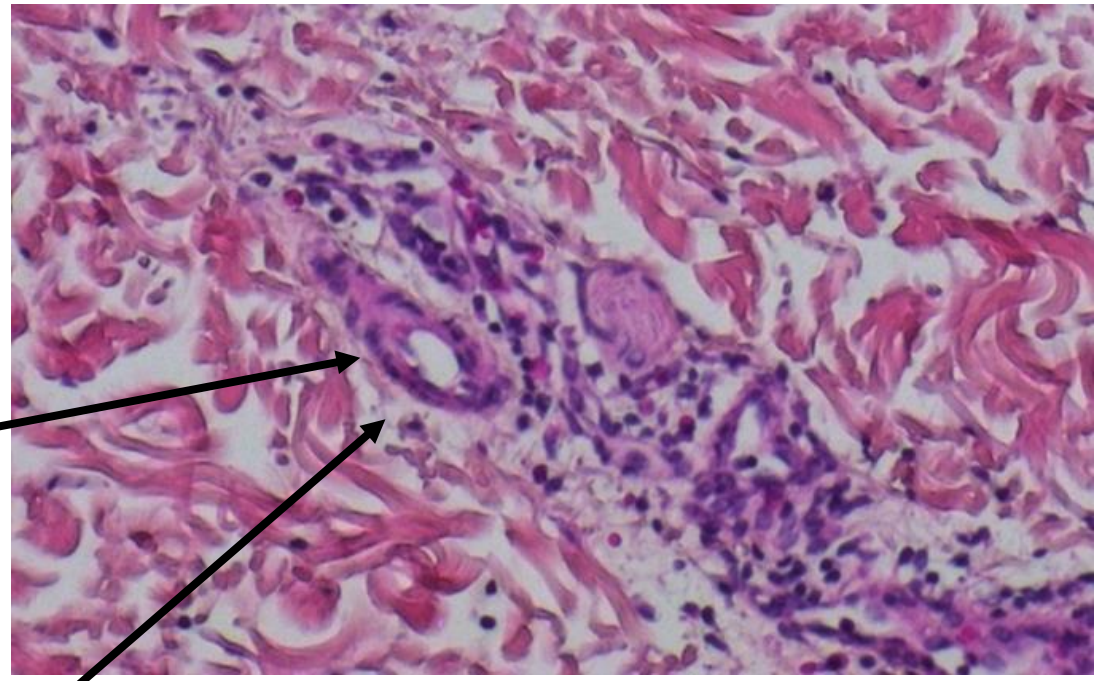
  - other symptoms

  (fatigue, oedema and joint or abdominal pain



HISTOLOGY

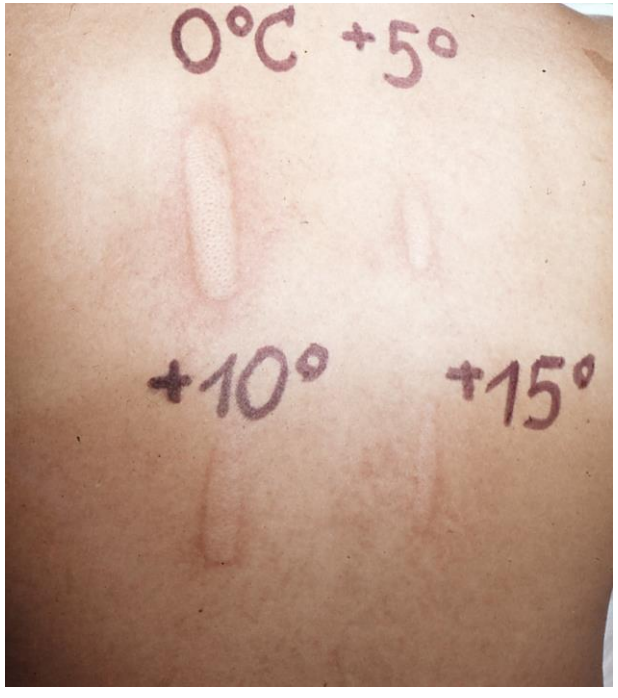




Dermal oedema
Perivascular and intersticial infiltrate of lymphocytes, eosinophils, neutrophils
Minimal epidermal changes

ETIOLOGY – 50% no cause identified

- ALLERGIC – I., II. a III. type
- PSEUDOALLERGIC*- nonIgE, C
  (drugs, additives, chinesee medicine)
- PHISYCAL – cold, heat, pressure
  vibration, UV, water…..
- AUTOIMUNNE *
  IgG anti FccRI/IgE
- IDIOPATIC



LASTS MORE THAN 6weeks

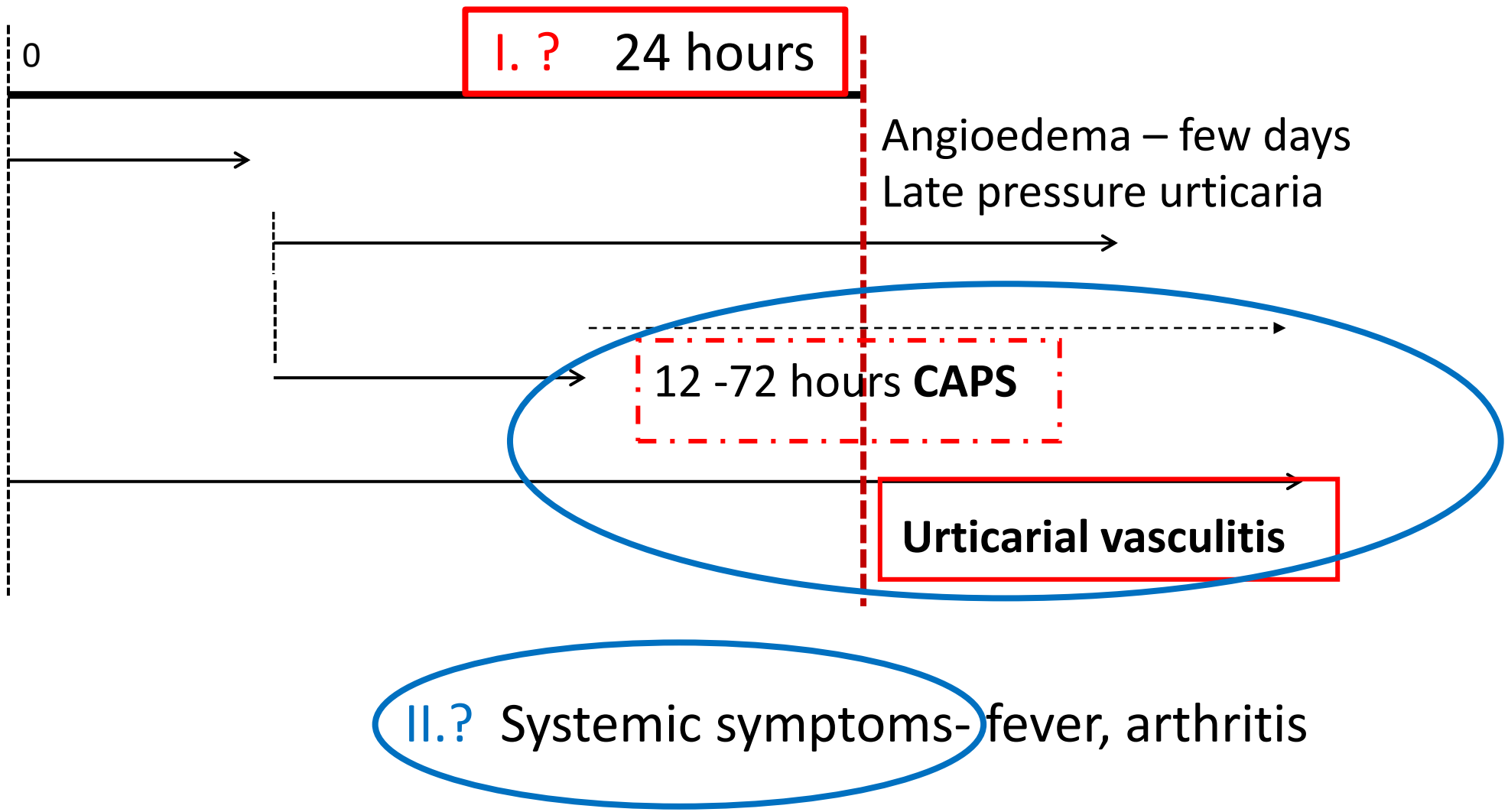
- ACUTE
- CHRONIC min 2xw
  0,1 - 3% in children
  older or adolescents, ♀>♂

WHAT IF IS IT NOT „JUST“ AN URTICARIA?

IMPORTANT CLUES

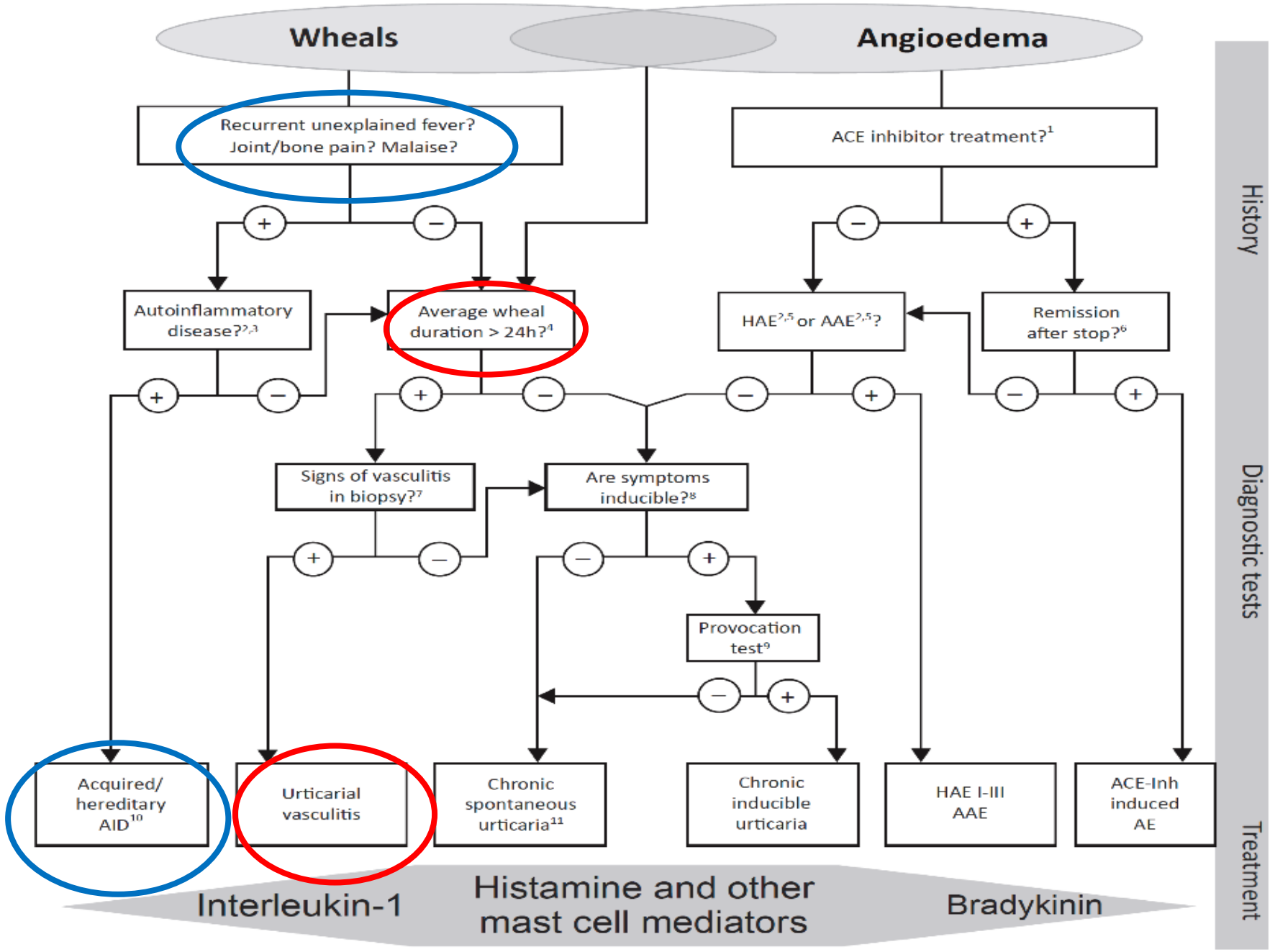
I. HOW LONG DOES SINGLE LESION LAST

II. PRESENCE OF SYSTEMIC SYMPTOMS



CONNECTIVE TISSUE DISORDES
MONOCLONAL GAMAPATHY
LEUKEMIA, TUMORS
VIRUS (HBV, CV, EBV)
DRUGS (ACE, PNC, SULPHONAMIDES)

CAPS
HIDS
TRAPS
SJIA
AOSD
Schnitzler syndrome

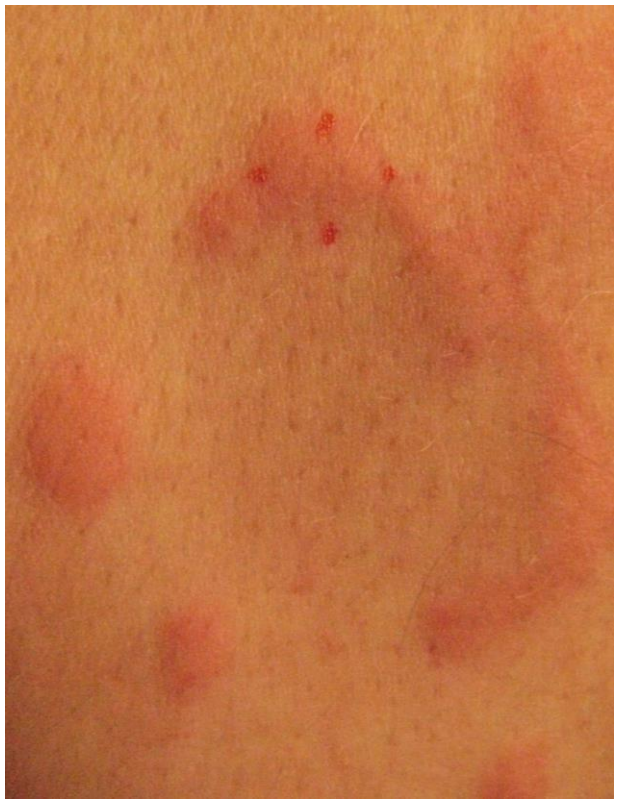


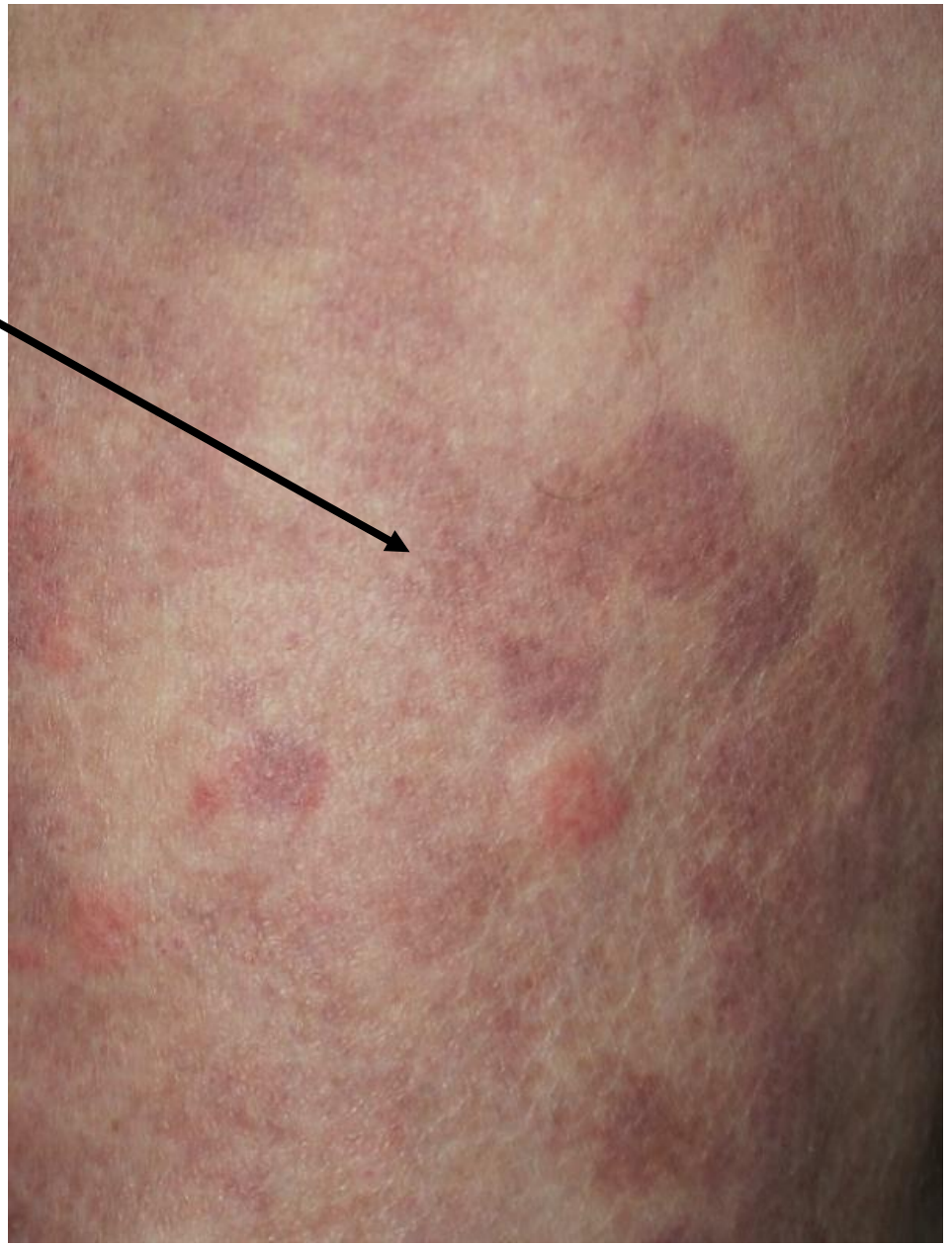
http://urticariaday.org/urticaria-day-2019/urticaria/the-new-urticaria-guideline/

- residual changes after 24h: hyperpigmentation

  purpura

- not itchy, burning
- bad reaction to antihistamines





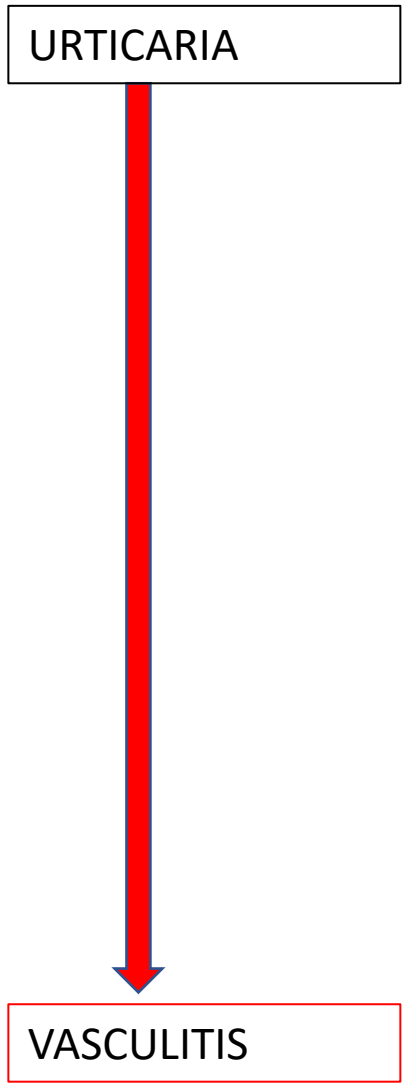
HISTOLOGY

Graduate changes

Neutrophilic infiltrate

Leucocytoklasia

Fibrinoid necrosis
Endothelial oedema



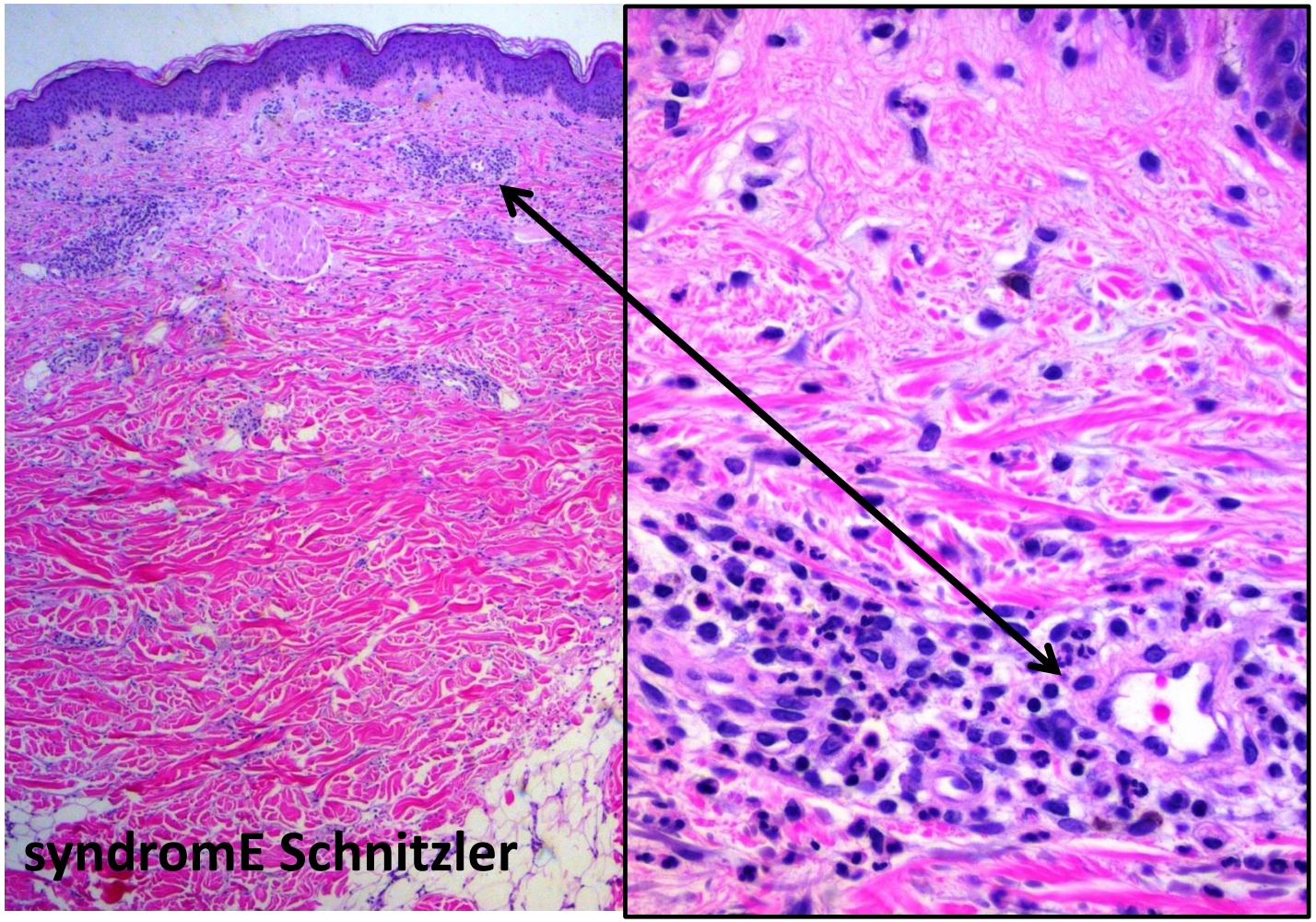
Mastocytes
Eosinophils

IL-1
Neutrophils

IK
Complement
Neutrophils

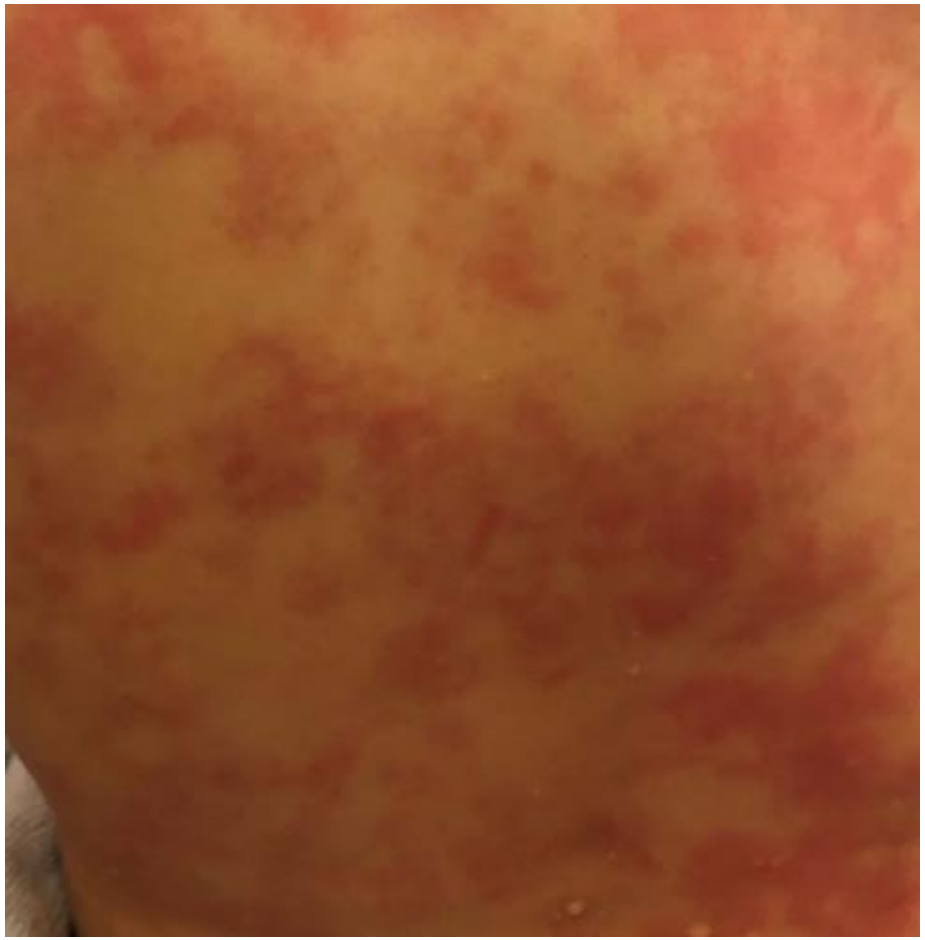
NEUTROFILIC URTICARIA

….neutrophilic urticaria with systemic inflammation

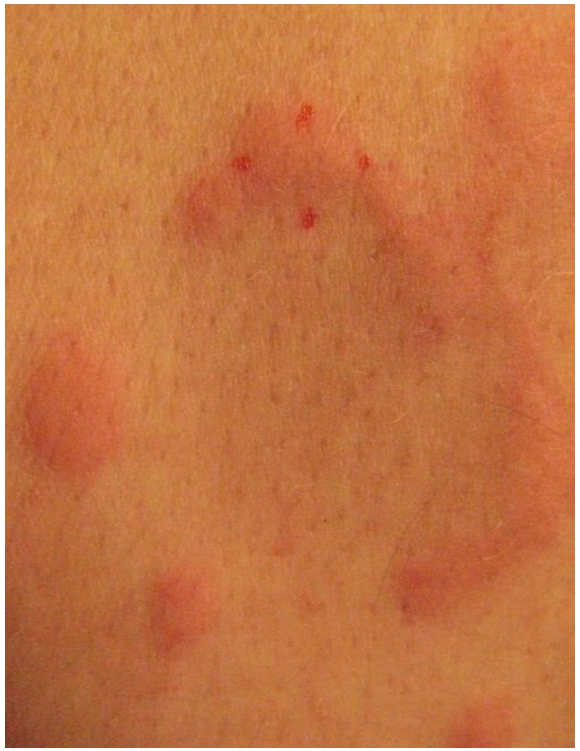


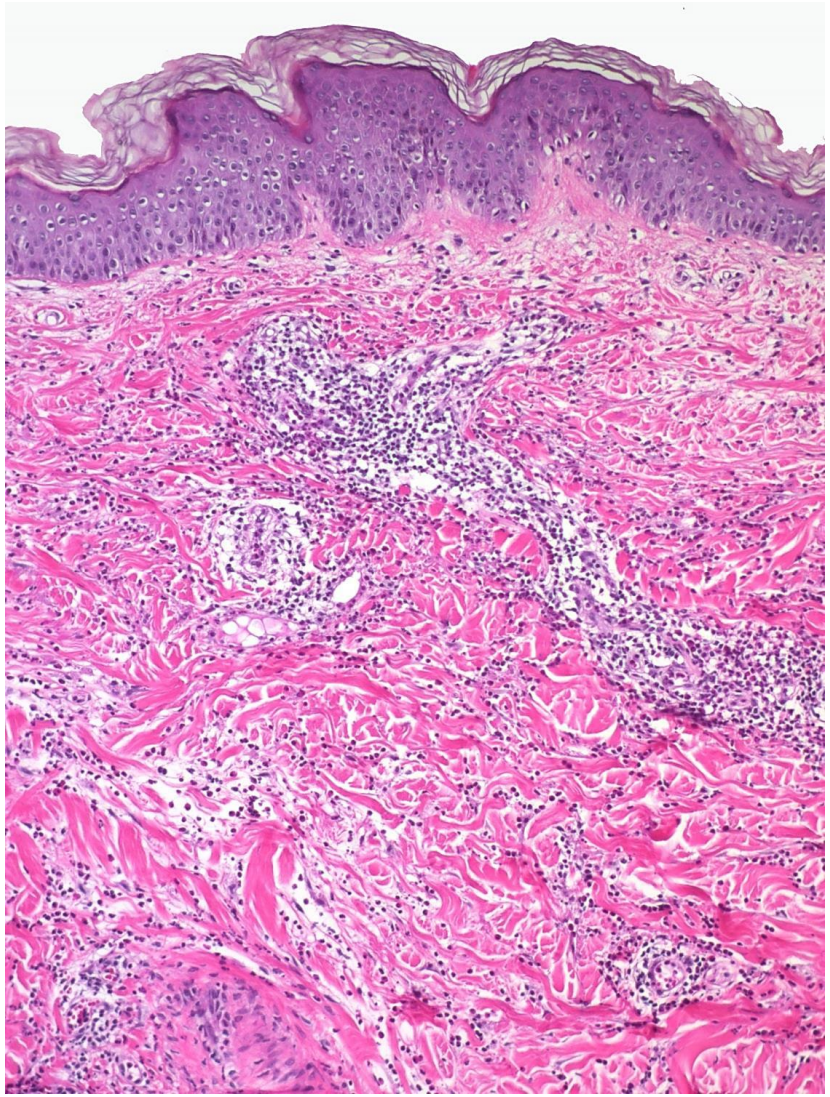
Normal capillary wall without vasculites changes
perivascular mononuclear infiltrates with enutrophils and mild oedema of superficial corim – sign of clinical wheal

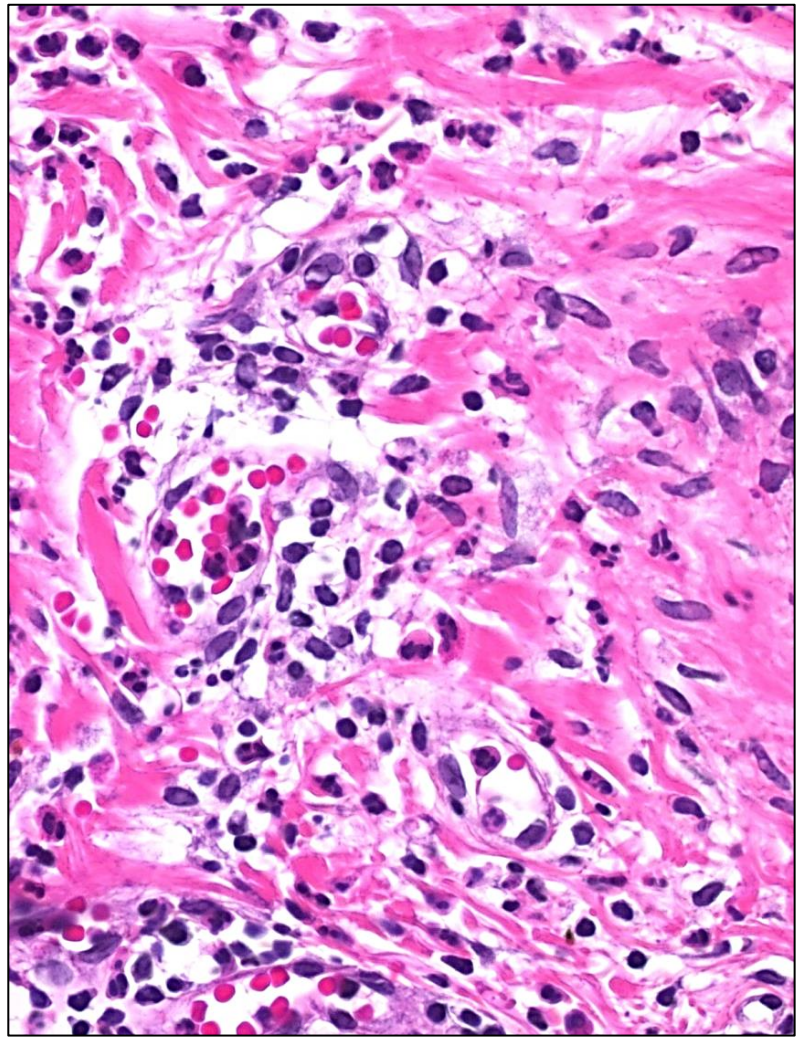
Serum sickness like reaction



URTICARIA VASCULITIS - 2-10%



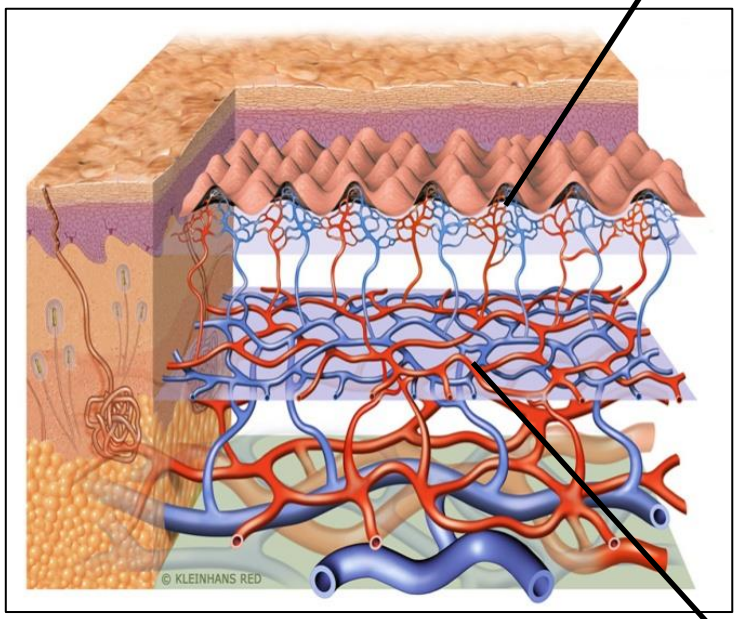




COLLAGEN VASCULAR DISEASE
MONOKLONAL GAMAPATHY
LEUKEMIA, TUMORS
VIRUSES
DRUGS
IDIOPATIC

erytrocyte extravasates, neutrophils, leukocytoclasia
+ clinical picture

VASCULITIS



SMALL VESSEL VASCULITIS
(mostly IK+C+Neu)

IgA vasculitis (HSP)
Urticaria-vasculitis

PALPABLE PURPURA
MACULES, PAPULES, URTICA
VESICLES, PUSTULES

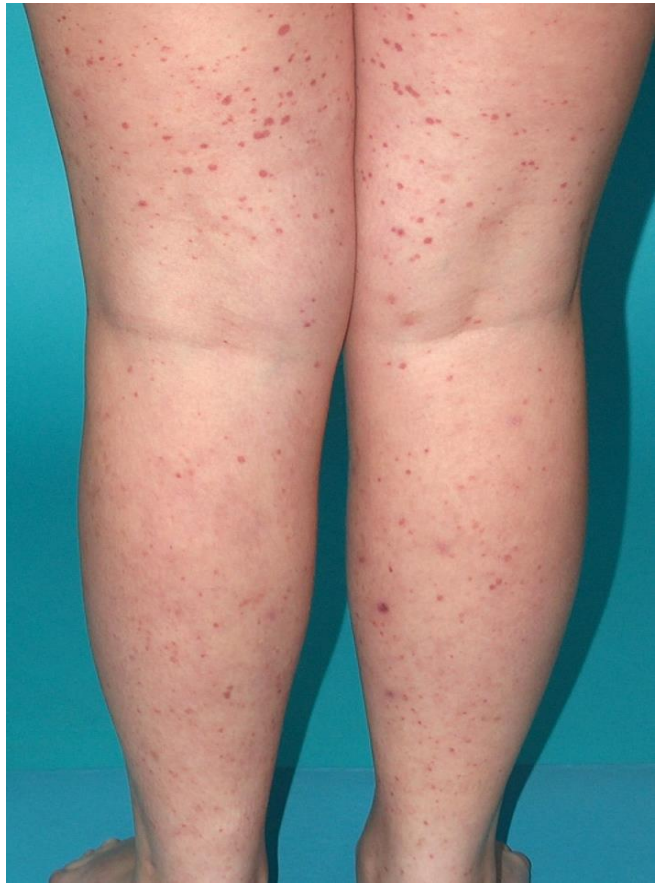
MIXED (SMALL+ MIDDLE) VESSEL VASCULITIS
(s ANCA)
MPA (Microscopic polyangiitis)
GPA (Granulomatosis with polyangiitis)
….

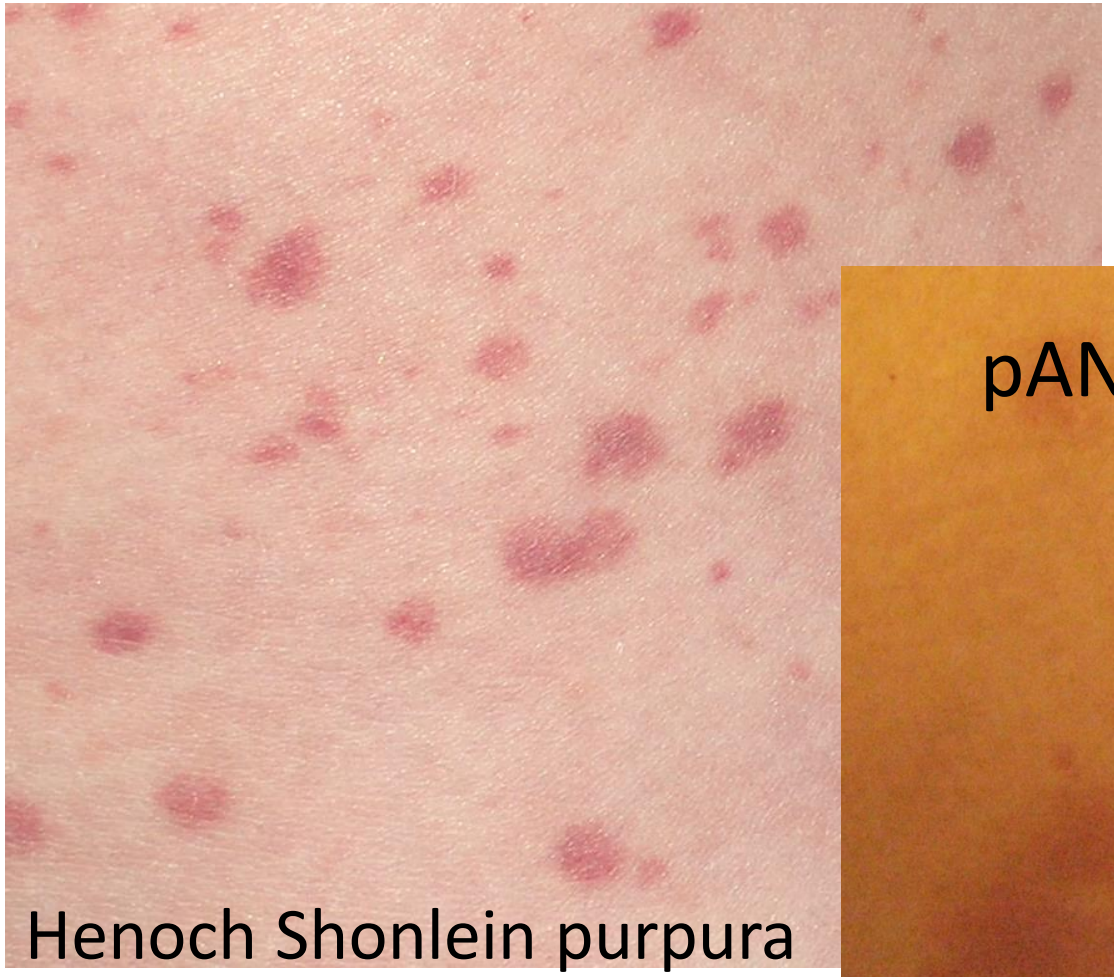
MIDDLE VESSEL VASCULITIS
Polyarteriitis nodosa
Kawasaki disease

…..

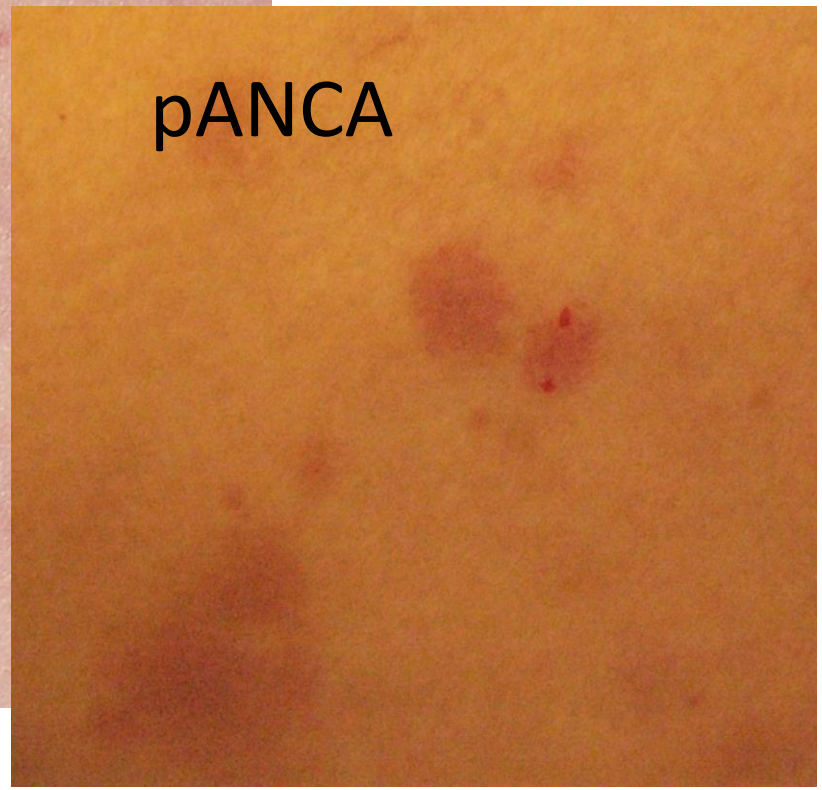
NODULES, NECROSIS,
ULCERATION,
LIVEDO RACEMOSA
pseudo-SWEET SYNDROME
pseudo-PYODERMA GANGRENOSUM

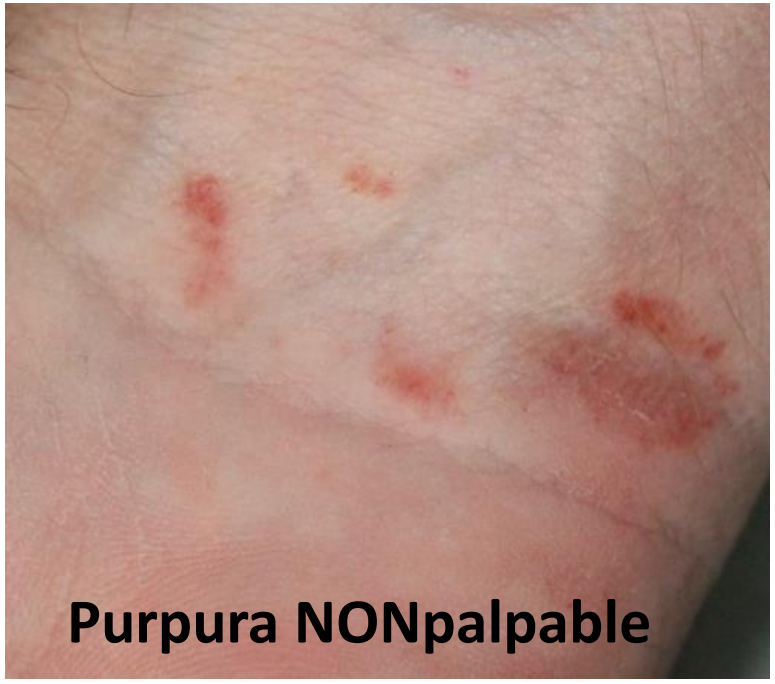
SMALL VESSEL VASCULITIS

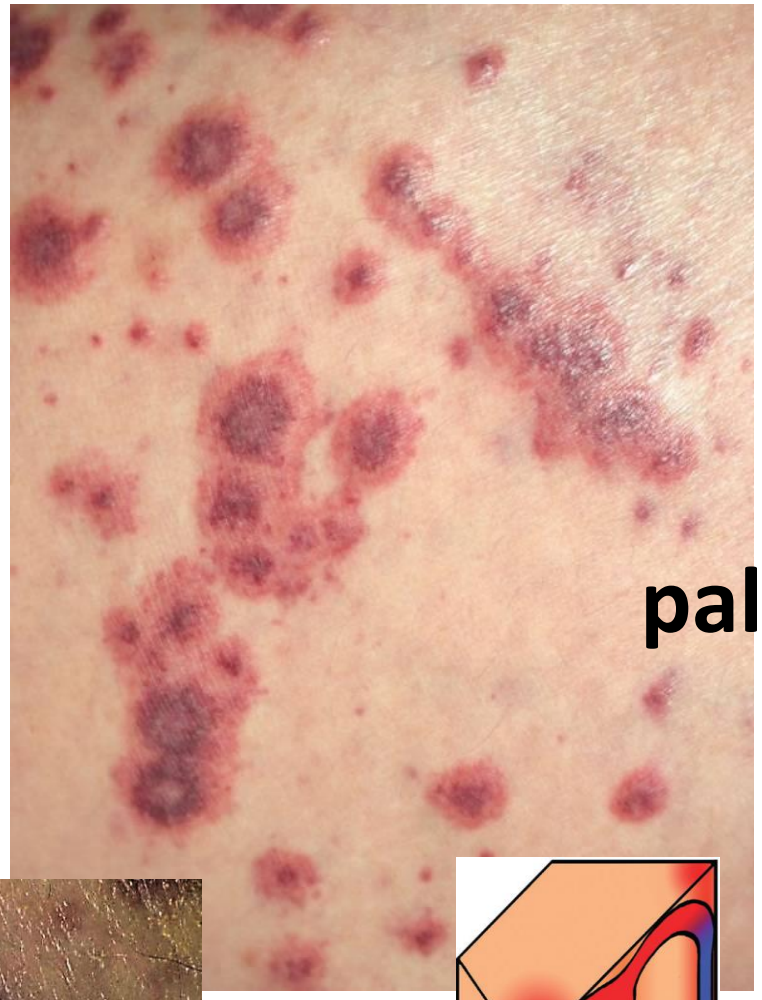


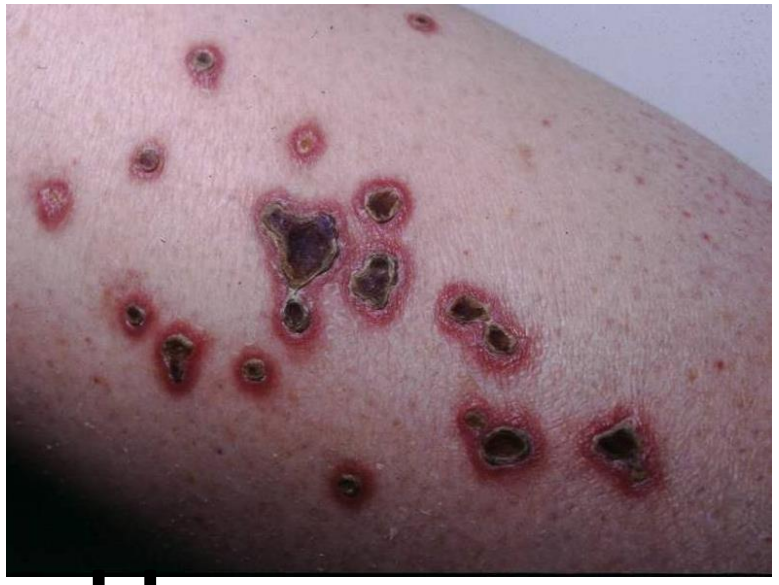


Henoch Shonlein purpura

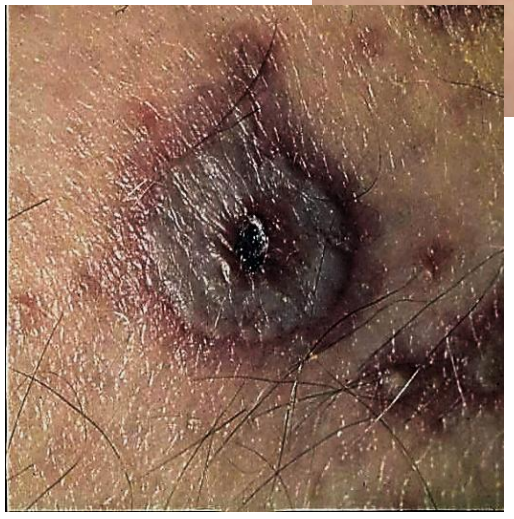


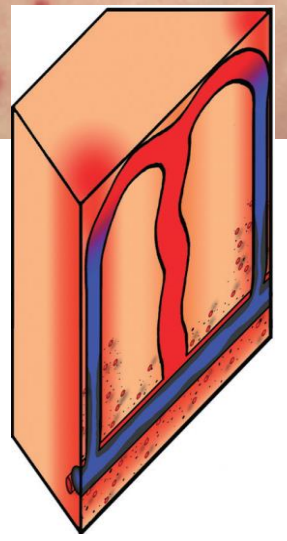


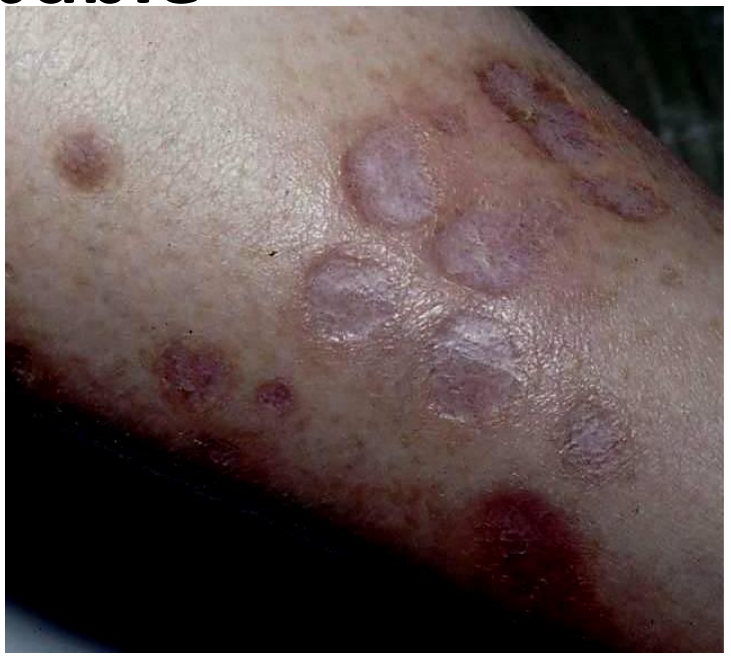




palpable





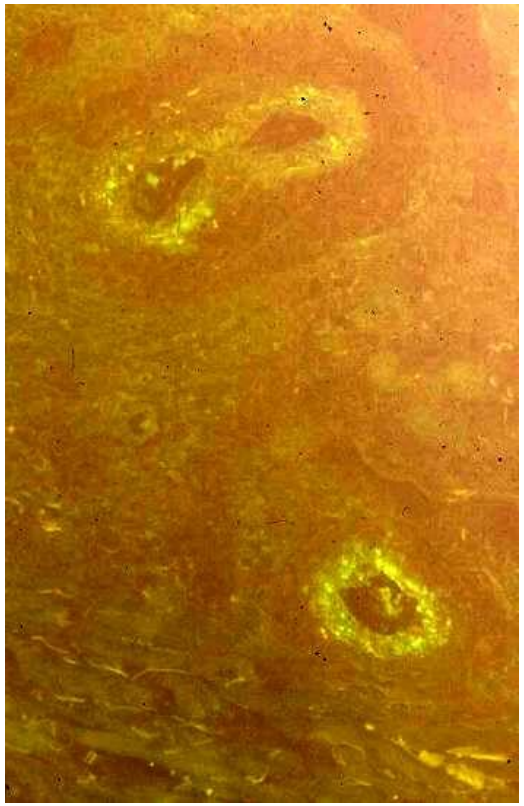


DIRECT IMMUNOFLUORESCENCE HELPFULL IN DIAGNOSIS

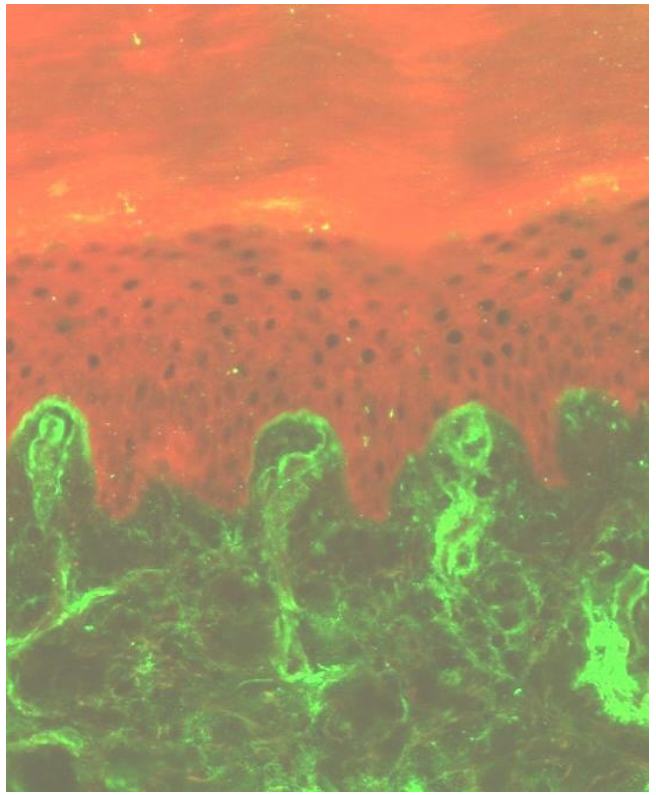
Biopsy of *LESIONAL skin*: lesion should *NOT BE OLDER THAN* ***24 HOURS***

Type of fluorescence: complement C3, Ig M,G, A, fibrinogen

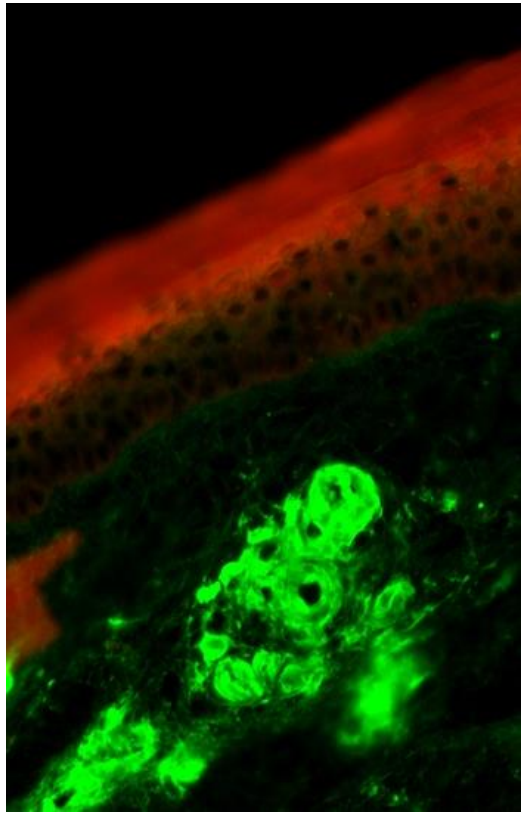
IgA: 90% children / 10% adults **IgG/IgM:** 80% adults



C3



Ig A



fibrinogen

CLINICAL CHARACTERISTICS

min 1 systemic sign in 80% of patients

lower limb localization in 93%

IgA: lesions on buttocks

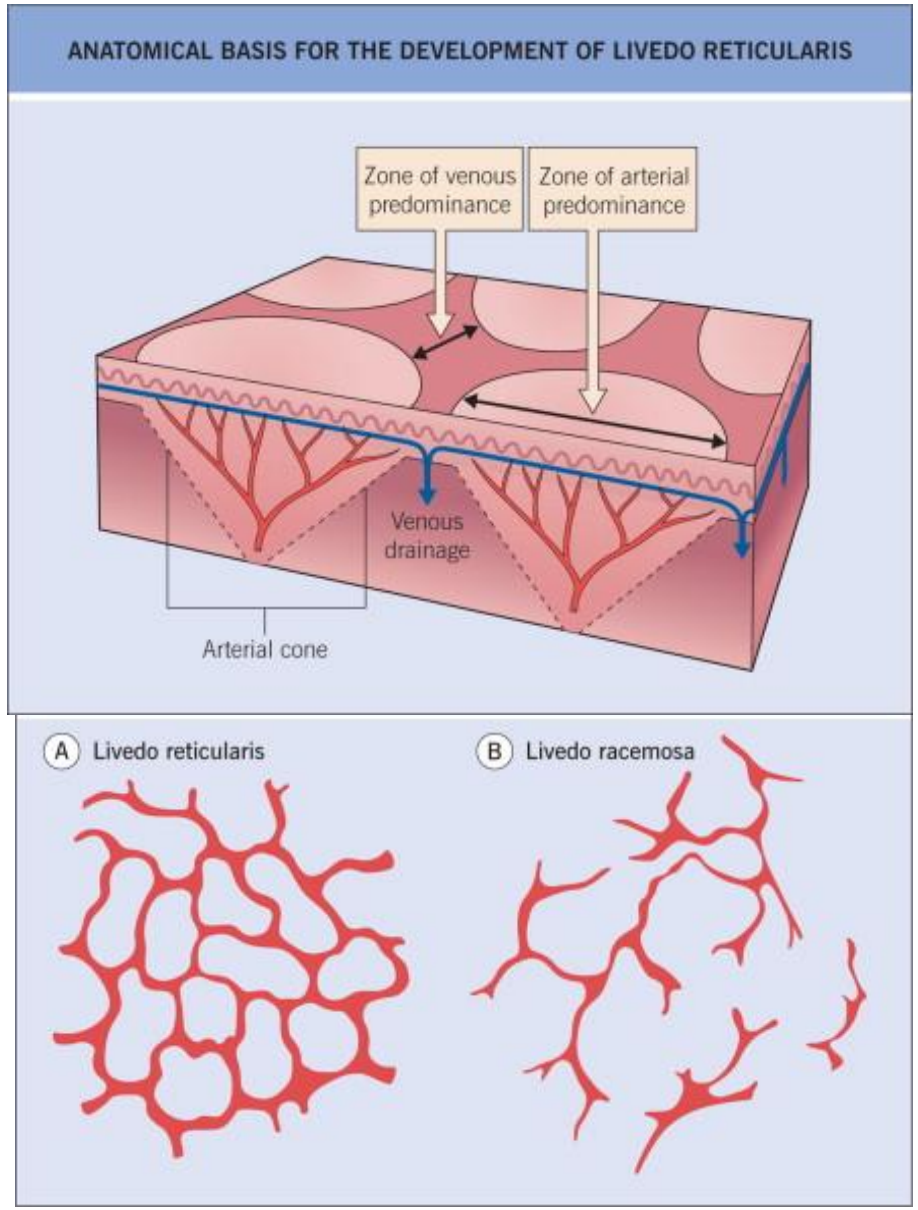
abdominal pain X non-IgA - headache

COURSE: a) one episode spontaneously regressing (60%)

b) recurrent (20%)

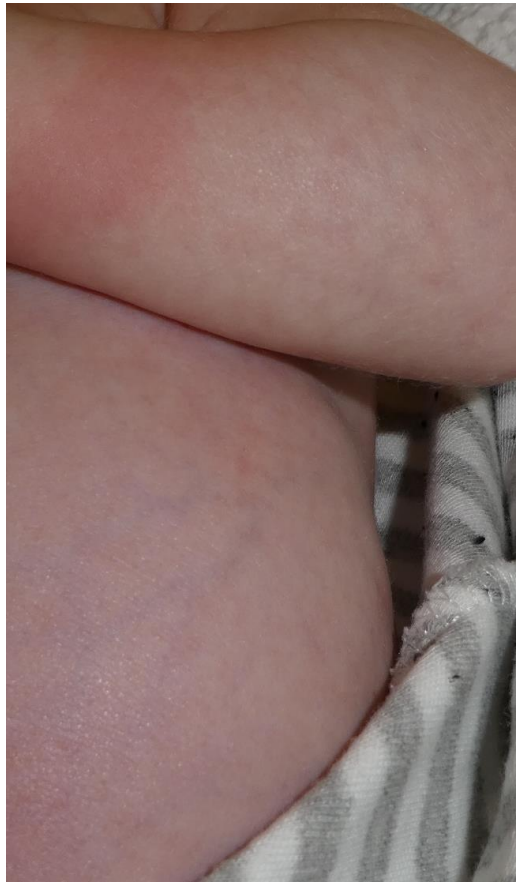
c) chronic (20%)

MIDDLE VESSEL VASCULITIS



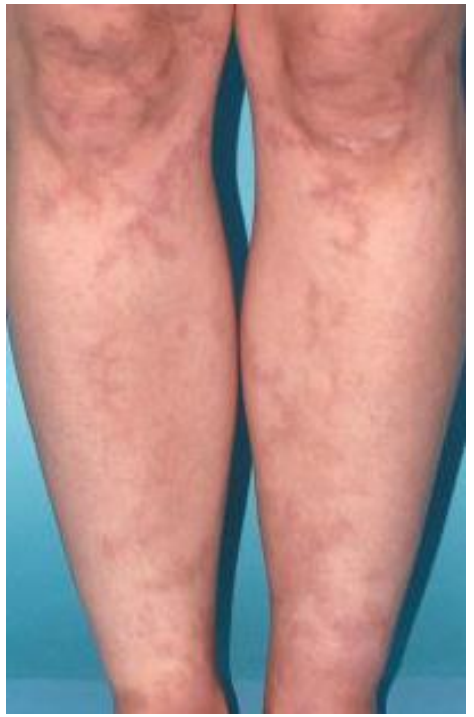
↑deoxyg Hgb, arteriolospasm (cold, autonomic dysfunction – common in neonates)

FUNCTIONAL CHANGE

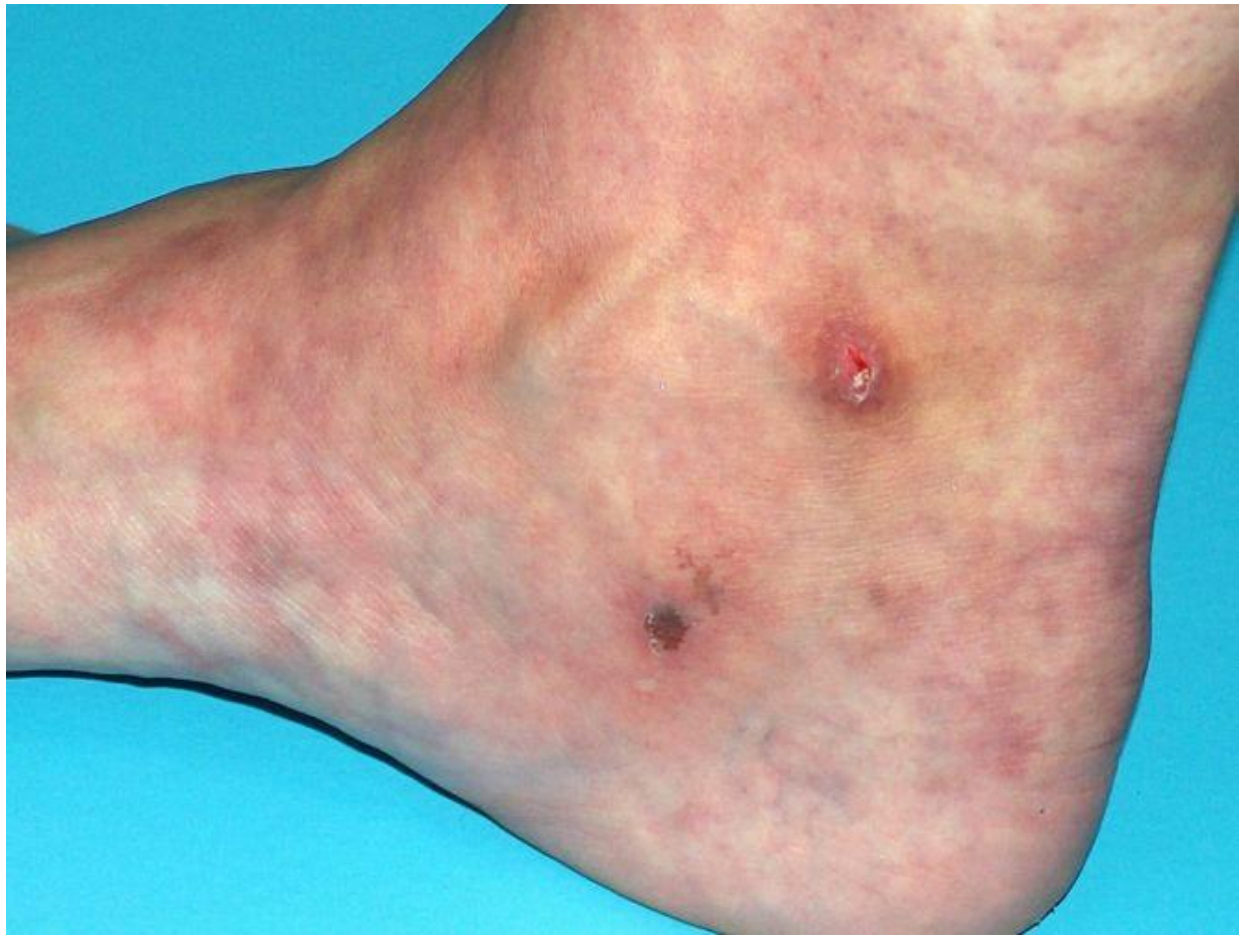


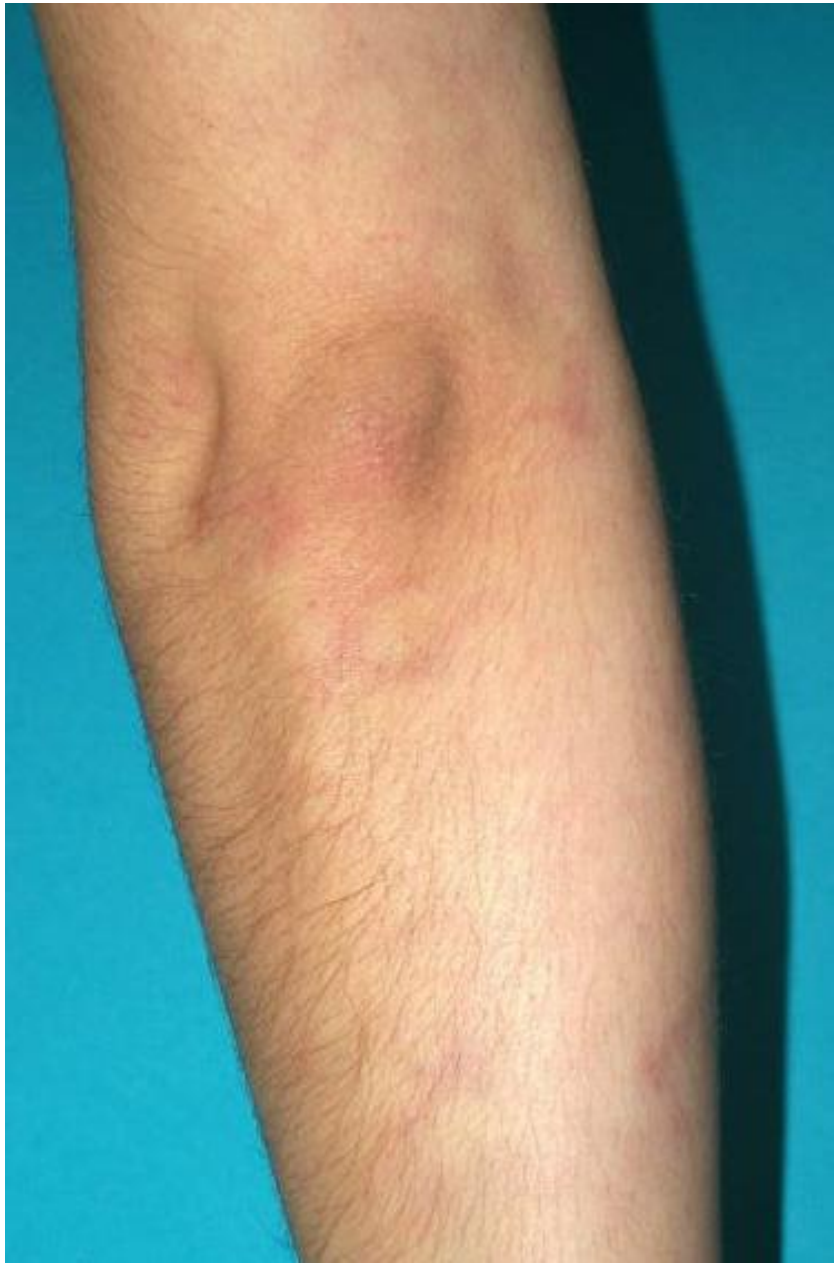
LIVEDO RETICULARIS

endotelial dysfunction hypercoagulation (vasculitis, collagen vascular disease, tumors, ….

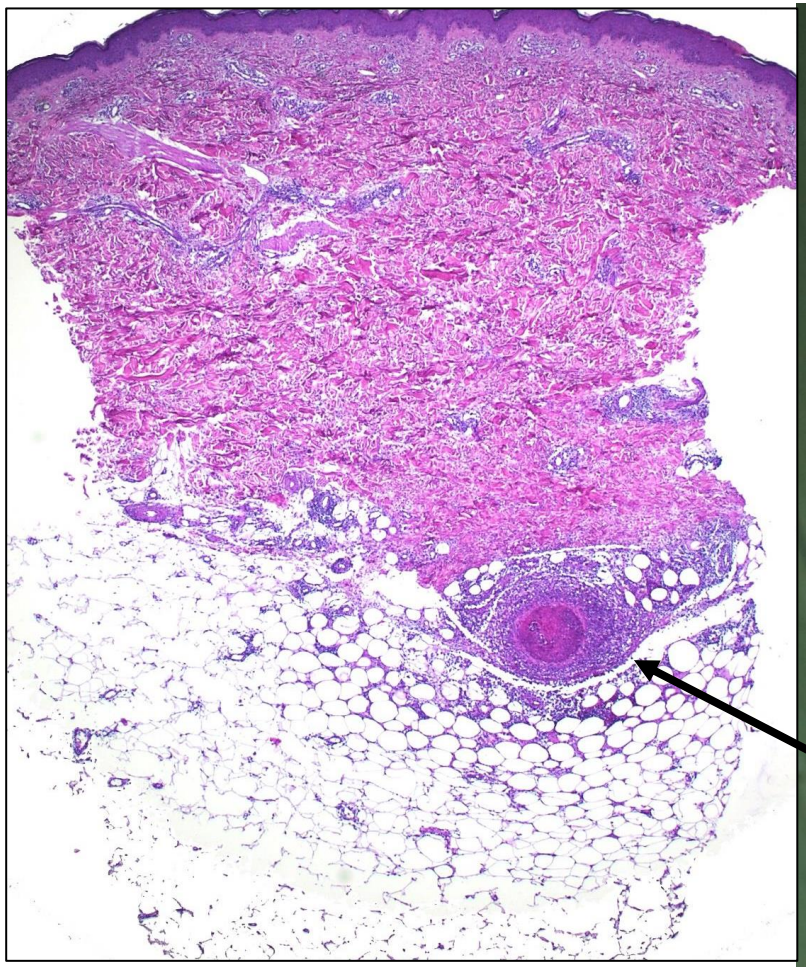


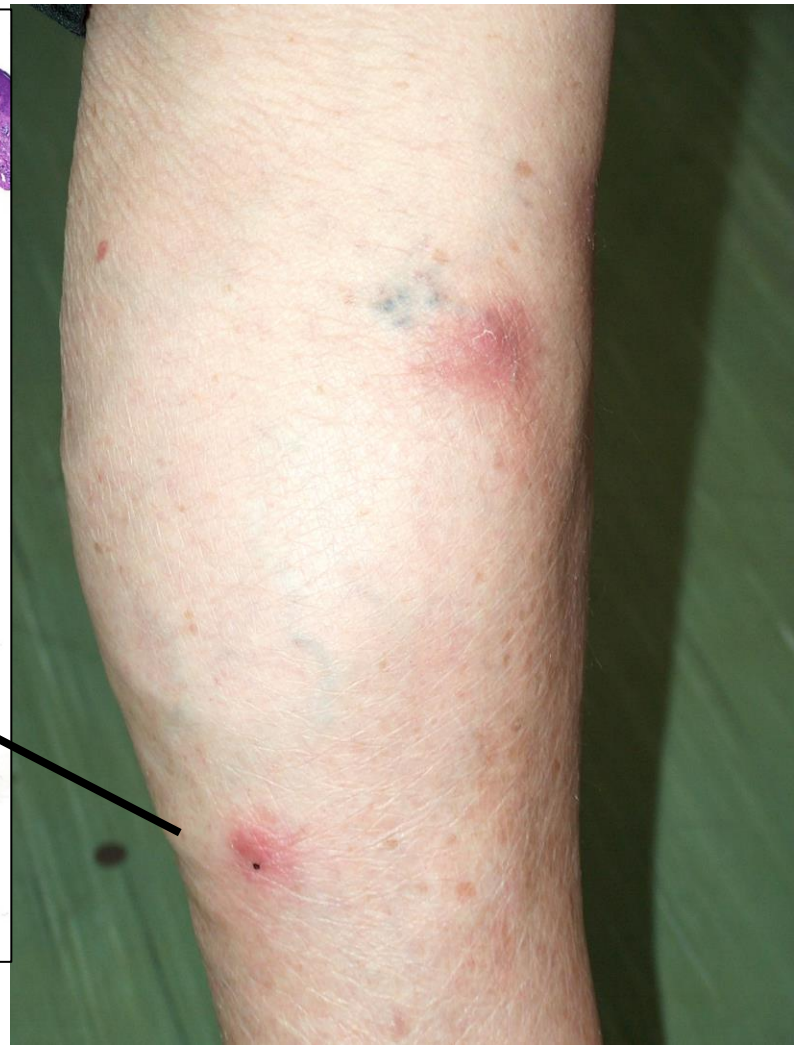
LIVEDO RACEMOSA

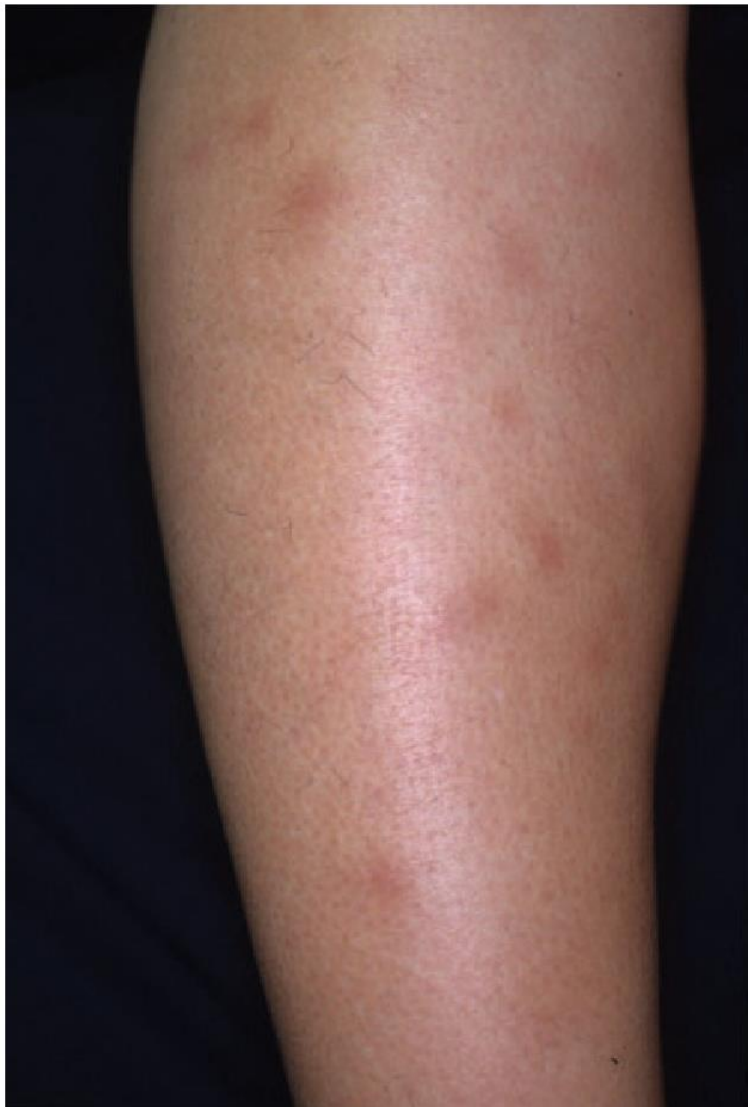




POLYARTERITIS NODOSA







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