Vesiculobullous reaction pattern

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Vesiculobullous reaction pattern

- Early lesions should always be biopsied to ensure that a histopathological diagnosis can be made
- Once regeneration of the epidermis commences or secondary changes such as infection or ulceration occur, accurate diagnosis of a vesiculobullous lesion may not always be possible.

Vesiculobullous reaction pattern

- Anatomical level of split (intra/subcorneal; within the spinous or malphigian layers;suprabasilar; beneath the epidermis)
- Mechanisms responsible for the split (spongiosis; acantholysis;ballooning degeneration)
- Inflammatory component (subepidermal blisters) (neutrophils, eosinophils, lymphocytes, cell poor)

The vesiculobullous reaction pattern

6

Vesiculobullous reaction pattern: diagnosis

- Paraffin embedded material :HE (PAS/Gram)
- Direct immunofluorescence (DIF)
- Indirect immunofluorescence (salt-split skin) (especially in some subepidermal disorders)
- (Electron microscopy)

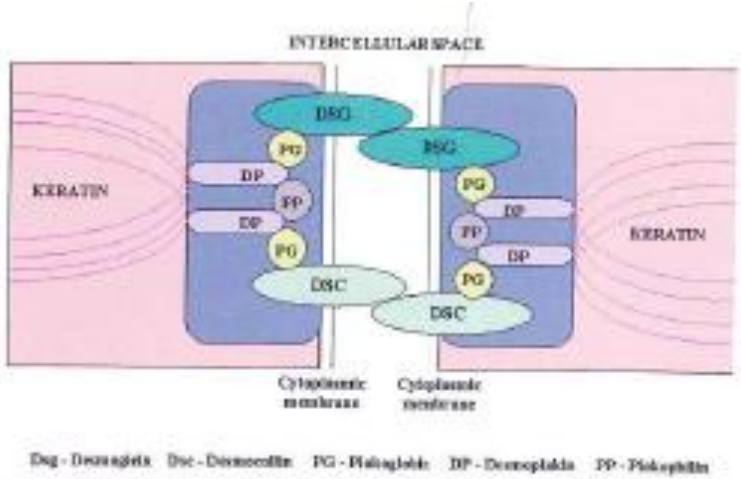
TABLE 9-4. DIRECT INFILTRATING INFLAMMATORY TESTING IN VESICULOBULLOUS DERMATOSES

Dermatosis	Principal Immunoreactant	Site	Pattern
Pemphigus, all variants except:	IgG	ICS	Lace-like
IgA pemphigus	IgA	ICS	Lace-like
Paraneoplastic pemphigus	IgG	ICS	Lace-like
	C3, IgG	BMZ	Linear
	C3, IgG	BMZ	Granular
Bullous pemphigoid	C3, IgG	BMZ	Linear
Cicatricial pemphigoid	C3, IgG	BMZ	Linear
Herpes gestationis	C3	BMZ	Linear
Epidermolysis bullosa acquisita	C3, IgG	BMZ	Linear
Bullous systemic lupus erythematosus	C3, IgG	BMZ	Linear
	C3, IgG	BMZ	Granular
Dermatitis herpetiformis	IgA	BMZ	Granular
Linear IgA dermatosis	IgA	BMZ	Linear
Erythema multiforme	C3, IgM	BMZ	Granular
	C3, IgM	Vessels	Granular
Porphyria/pseudoporphyria	IgG	BMZ	Glassy broad
Bullous dermatosis of hemodialysis	IgG	Vessels	Glassy broad

Note: Other immunoglobulins may be present, but they are less intense when present and less frequently observed.
ICS, squamous intercellular substance; BMZ, epidermal basement membrane zone.

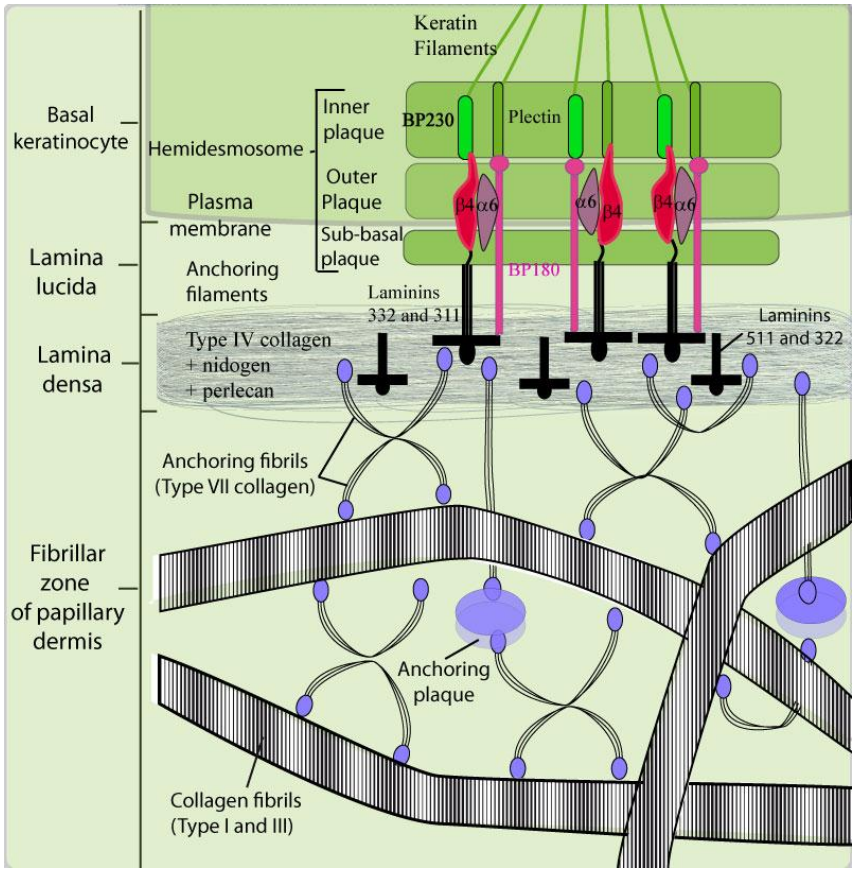
Table 6.1 Autoimmune bullous diseases – target antigens

Disease	Target antigen	Site of antigen	Other minor antigens reported and comments
Pemphigus foliaceus	Desmoglein 1	Desmosomes of upper epidermis	Desmocollin – antibodies to this alone in some endemic cases
Herpetiform pemphigus	Desmoglein 1	Desmosomes of upper epidermis	Desmoglein 3, desmocollin 3
IgA pemphigus (SPD type)	Desmocollin 1	Desmosomes (transmembrane)	
IgA pemphigus (IEN type)	Desmoglein 1 or 3	Desmosomes	Desmocollin 1, non-desmosomal transmembranous protein
Pemphigus vulgaris	Desmoglein 3	Desmosomes of lower epidermis	Desmocollin, 85 kDa antigen (in pemphigus vulgaris–Neumann), desmoglein 1
Epidermolysis bullosa acquisita	Type VII collagen	Anchoring fibris	IgA antibody to plectin; similar antigen in bullous SLE
Paraneoplastic pemphigus	Desmoglein 1, 3 Desmoplakin 1, 2	Cytoplasmic plaques	Envoplakin, BP230, periplakin, γ-catenin, plectin, 170 kDa, desmocollin 2 and 3
Bullous pemphigoid	BPAg1 (230) BPAg2 (180)	Hemidesmosome Transmembrane protein (NC16A domain)	80% have antibodies to 230, 30% to 180, and 20% only to 180 kDa antigen Others reported – 240, 190, 138, 120, 125, 105 kDa, plectin, desmoglein 3
Pemphigoid gestationis	BPAg2 (180)	See above	Others reported – 200 kDa, BP230
Dermatitis herpetiformis	Tissue transglutaminase (?TG3)	Gut, ?site in skin	IgA deposits haphazard in papilla
Linear IgA bullous dermatosis	LABD97, LAD-1 LAD285 (10–25%)	Lamina lucida Sublamina densa	97 kDa and 120 kDa antigens are degradation products of BP180 NC-1 domain of type VII collagen and others
Ocular cicatricial pemphigoid	Plectin	Conjunctiva	IgA antibody, may be heterogeneous
Cicatricial pemphigoid	BPAg2 (180) Epiligrin (laminin 332)	Against extracellular (C-terminal) domain α3 subunit of aminin 5	Many other epitopes exist on antigen Epiligrin cases uncommon (10% or more)
Deep lamina lucida pemphigoid	105 kDa	Lower lamina ucida	Clinically resembles TEN, pemphigus vulgaris
Anti-p200 pemphigoid	200 kDa	Lower lamina ucida	Clinically resembles BP, DH, or LABD



Dsg - Desmoglein Dsc - Desmocollin PG - Plakoglobin DP - Desmoplakin PP - Plakophilin

FIGURE 9-8. The desmosome. The desmosome complex includes desmogleins and desmocollins as transmembrane components, and plakoglobin, plakophilin, and desmoplakin as cytoplasmic components. The cytoplasmic domains of desmoglein and desmocollin associate with plakoglobin, which links intermediate filaments (keratin) to the desmosome through desmoplakin.



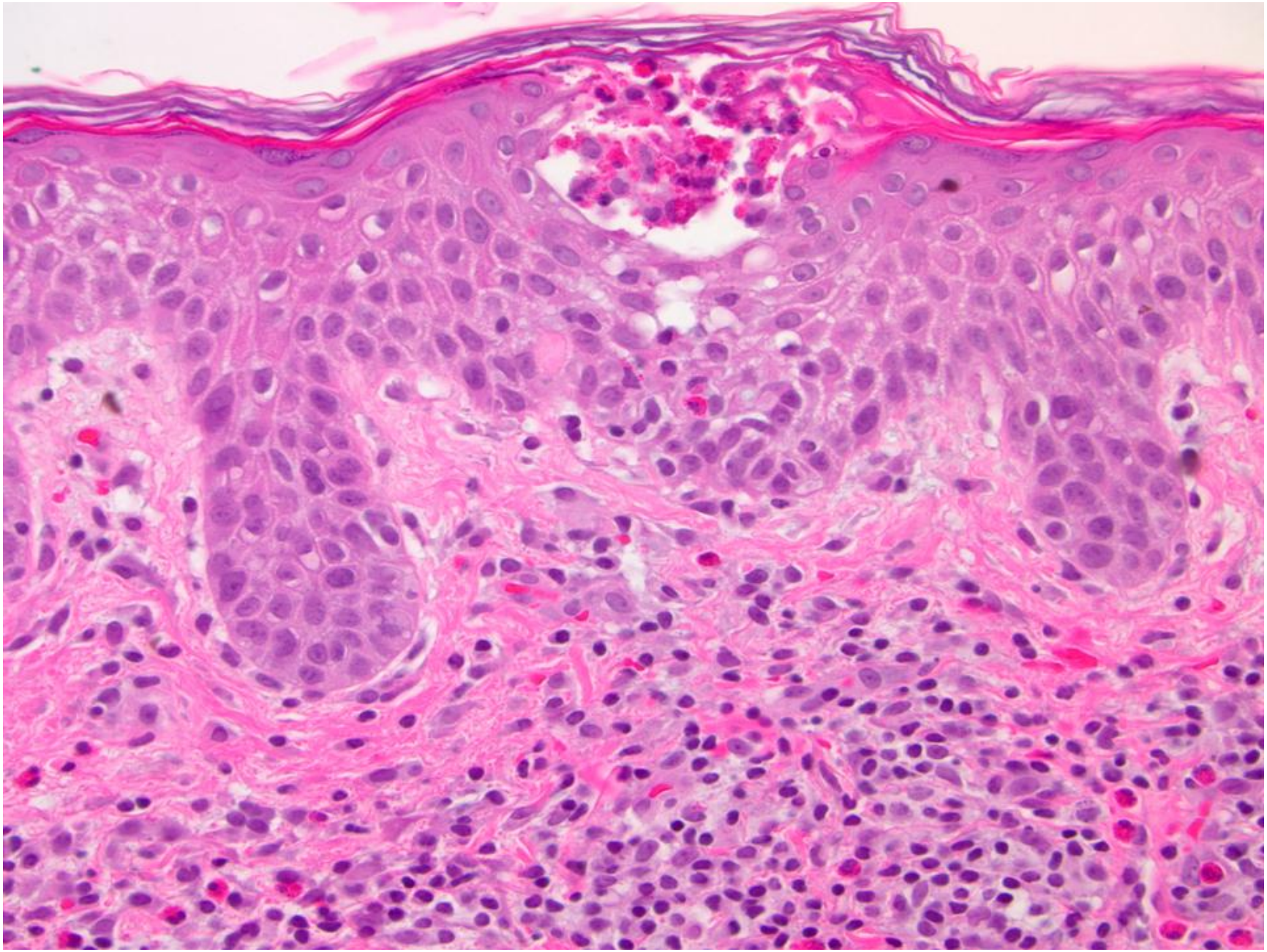
Case 1

- Female
- 64 y
- Pruritic urticarial papules, persisting for 2 weeks
- Urticaria? Eczema?

Prebullous (prodromal) stage bullous pemphigoid

Prebullous (prodromal) stage bullous pemphigoid

- Edema of the papillary dermis
- Superficial and mid-dermal perivascular infiltrate of lymphocytes and numerous eosinophils
- Eosinophils may line up along the basement membrane
- “eosinophilic spongiosis”
- Urticarial (“dermal hypersensitivity”) reaction pattern

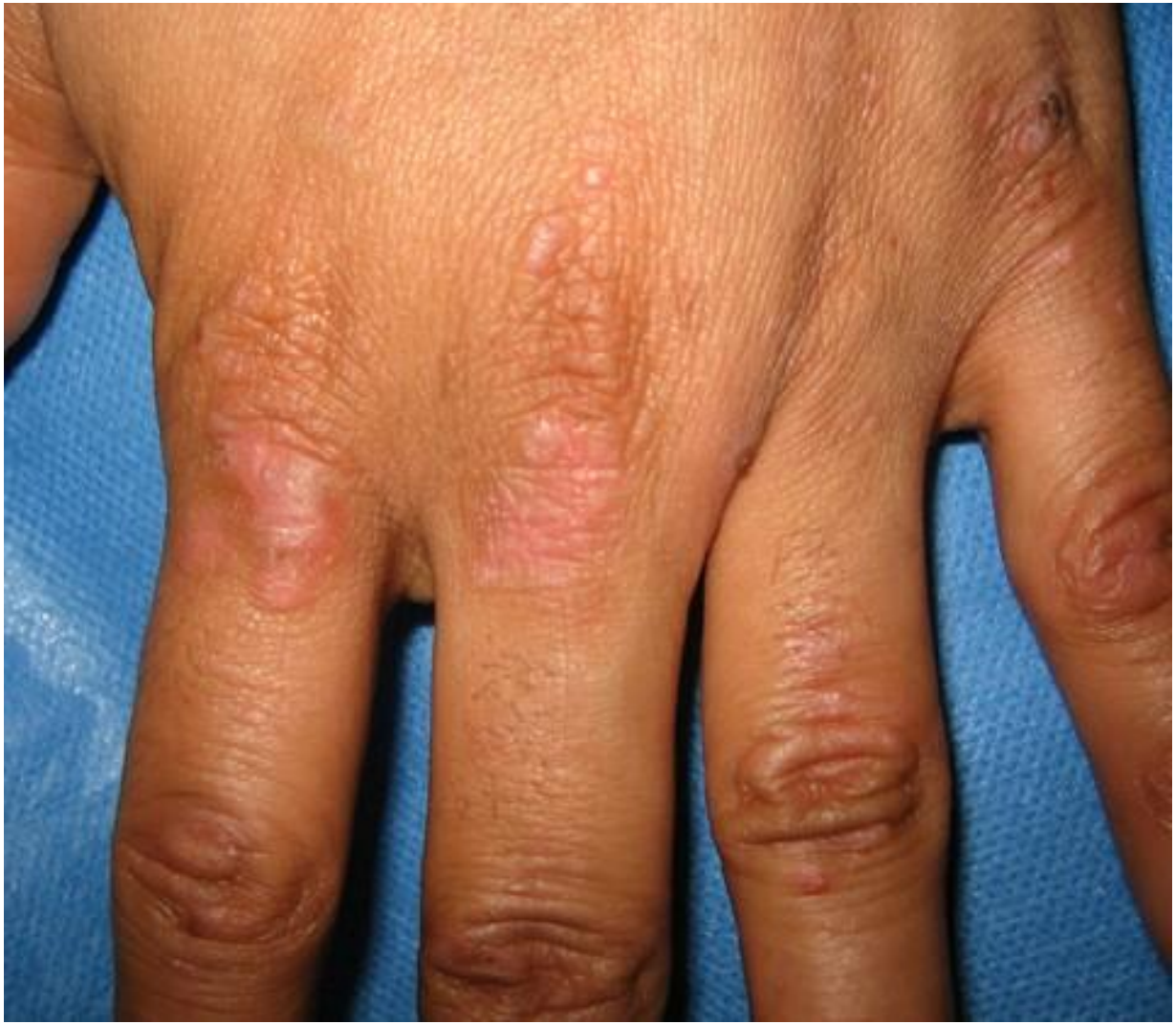


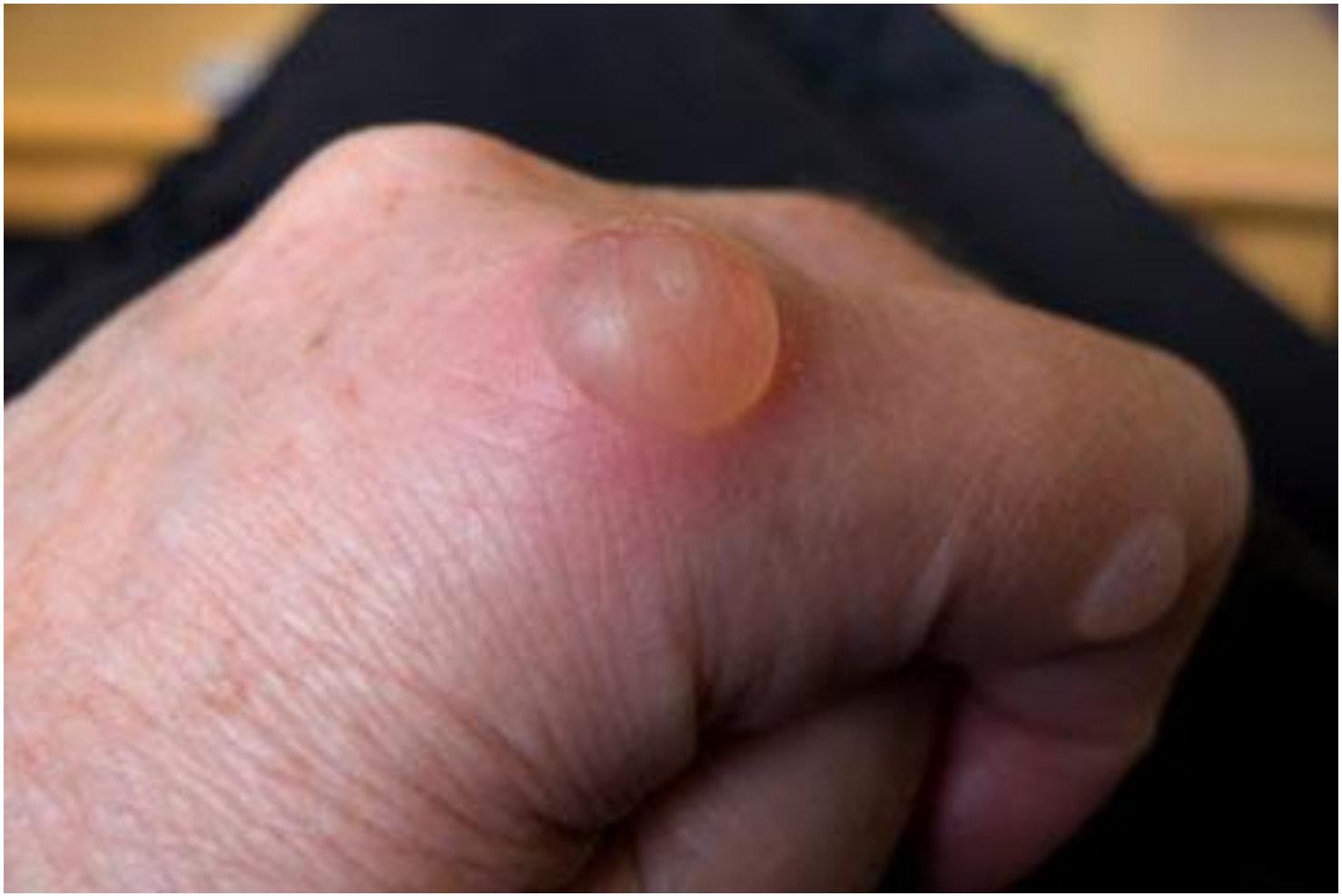
“eosinophilic spongiosis” differential diagnosis

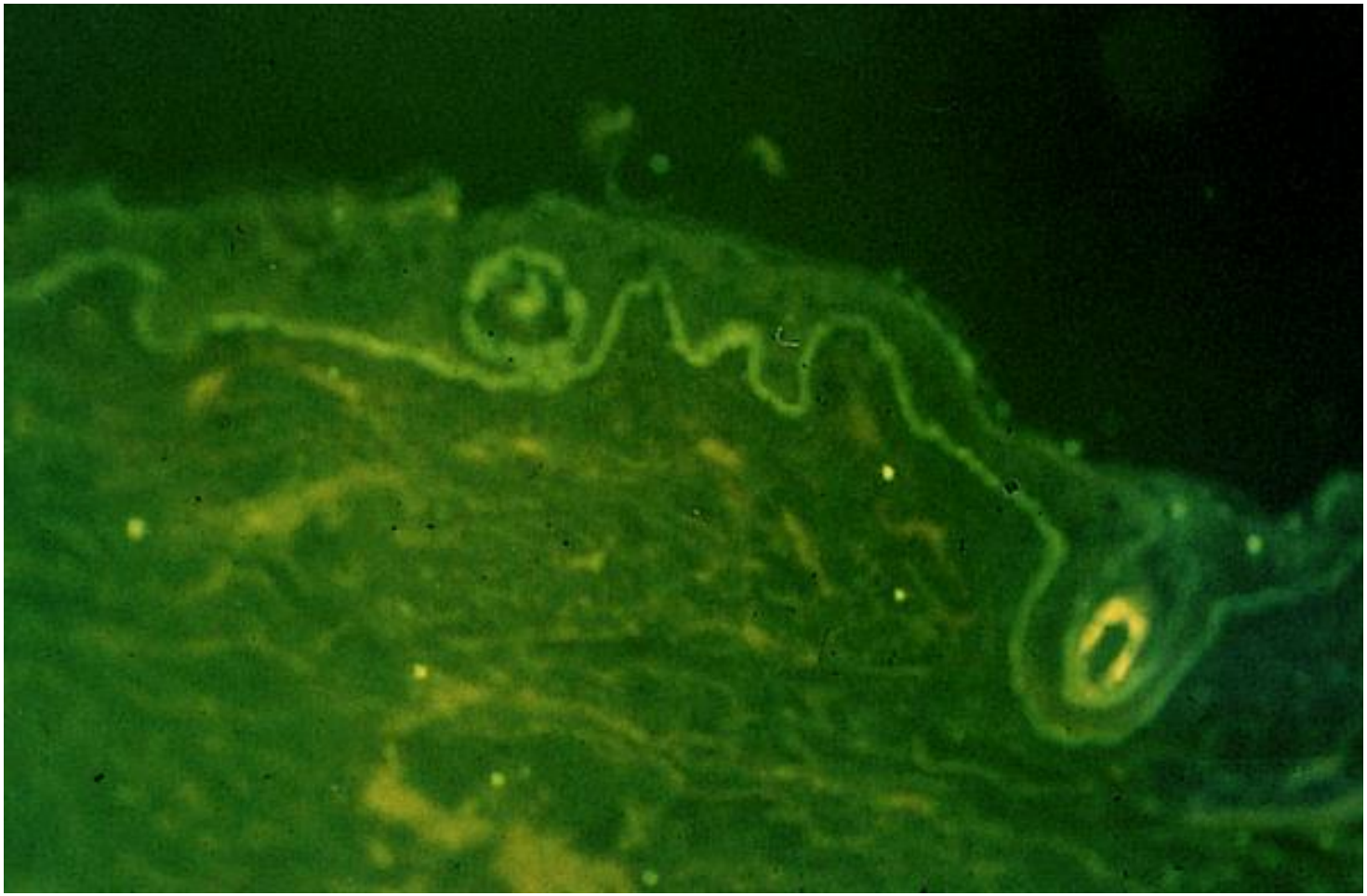
- Arthropod bite
- Drug reaction
- Acute allergic contact dermatitis
- Eosinophilic cellulitis (Wells’ syndrome)
- Churg-Strauss syndrome
- Bullous pemphigoid
- Herpes gestationes
- Pemphigus
- Pemphigus foliaceus

Case 2

- Male
- 38 y
- Crohn colitis
- Presenting for 8 months with multiple, pruritic papules and vesicles on the dorsa of her hands on which bullae arose







DIF: IgG deposition

Epidermolysis Bullosa Acquisita (EBA):

Epidermolysis Bullosa Acquisita (EBA)

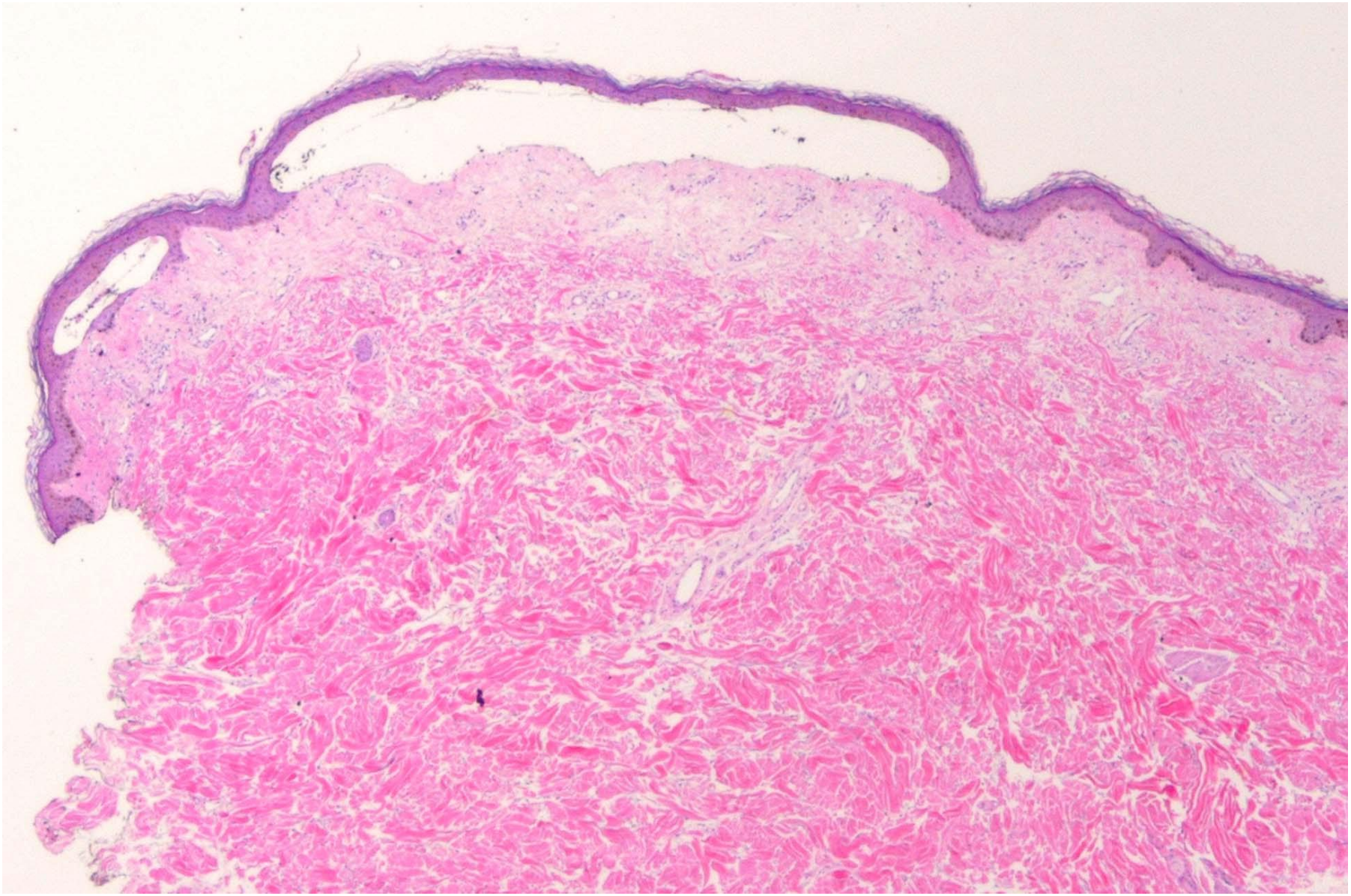
- “Dermolytic pemphigoid”
- Rare, non-hereditary subepidermal bullous disorder with heterogeneous clinical features
- Onset usually in mid-adult life
- Non-inflammatory bullae developing in areas subjected to minor trauma (acral areas, extensor surface of the limbs)
- Nail dystrophy and alopecia
- Involvement of the mucous membranes (30-50% of cases): oral erosions and blisters; ocular involvement
- Association with various systemic diseases (lupus erythematosus, scleroderma, rheumatoid arthritis, inflammatory bowel disease,….)
- Its onset has also been triggered by pregnancy and antibiotics

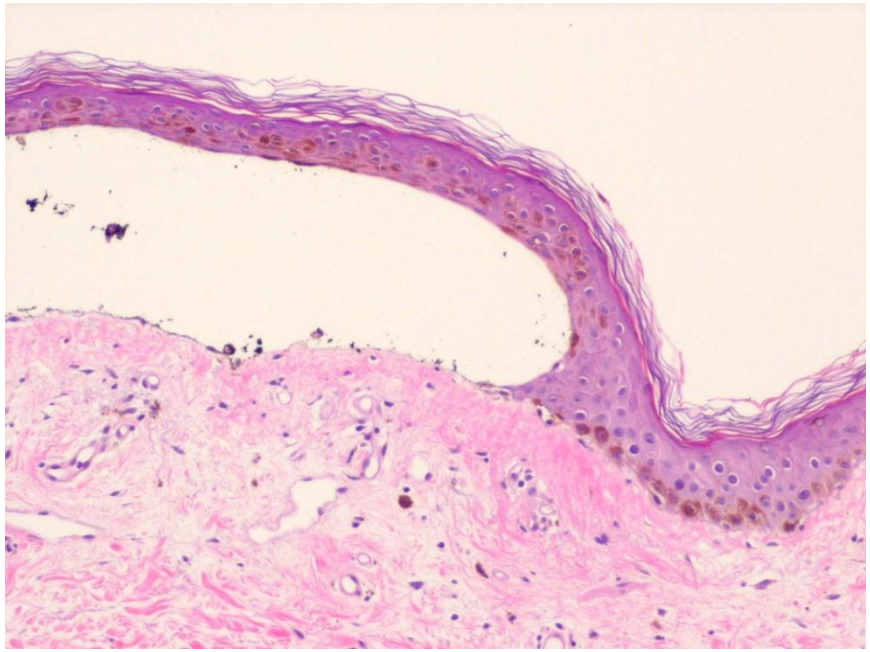
Epidermolysis Bullosa Acquisita (EBA): key microscopic features

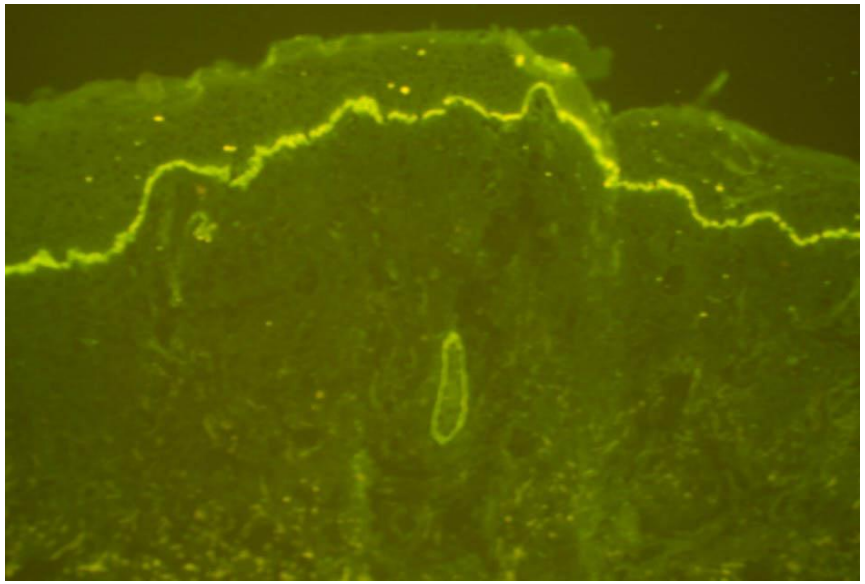
- The most common pattern is that of a subepidermal blister with fibrin and only a few inflammatory cells in the lumen (non-inflammatory pattern)
- Rare inflammatory-rich cases
- Older lesions may demonstrate dermal scarring and milia (“cicatricial pemphigoid like”)

Epidermolysis Bullosa Acquisita (EBA): immunofluorescence testing

- DIF: linear **IgG and C3** at the dermal-epidermal junction (but IgM and IgA may be present as well)
- Increasing number of immunoglobulin subclasses at the dermo-epidermal junction favor a diagnosis of EBA over bullous pemphigoid
- The presence of linear C3 alone at the dermo-epidermal junction favors bullous pemphigoid over EBA
- However use of routine DIF cannot reliably distinguish between bullous pemphigoid and EBA!!!
- for differentiation with BP: salt split skin with antibodies binding to the dermal side (vs. epidermal side for BP)



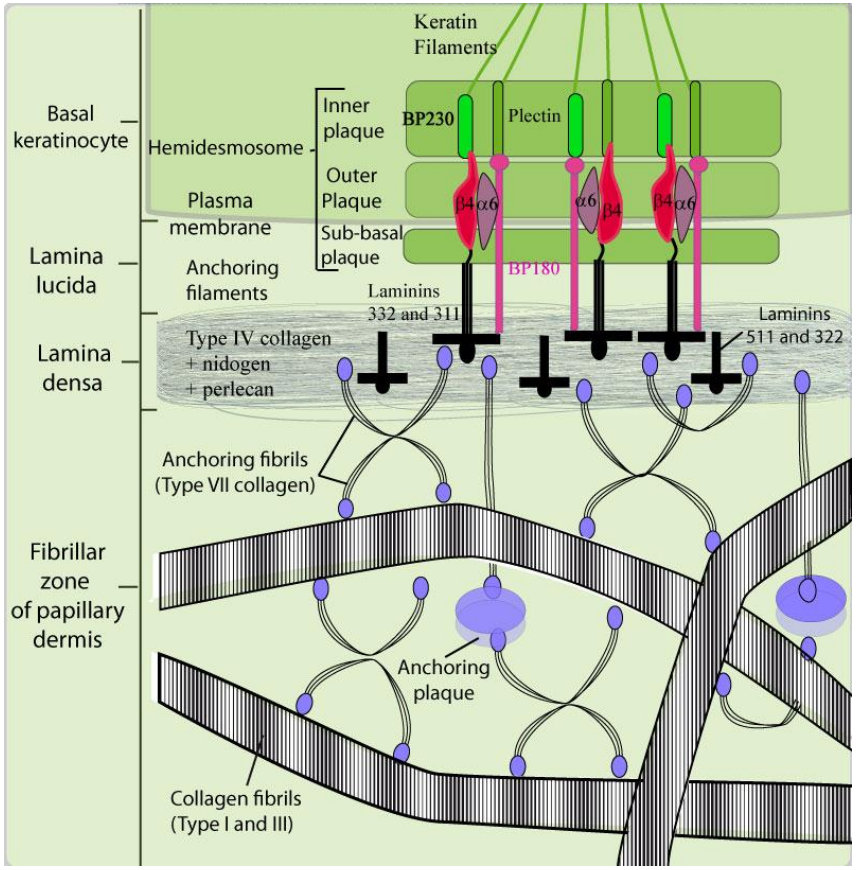


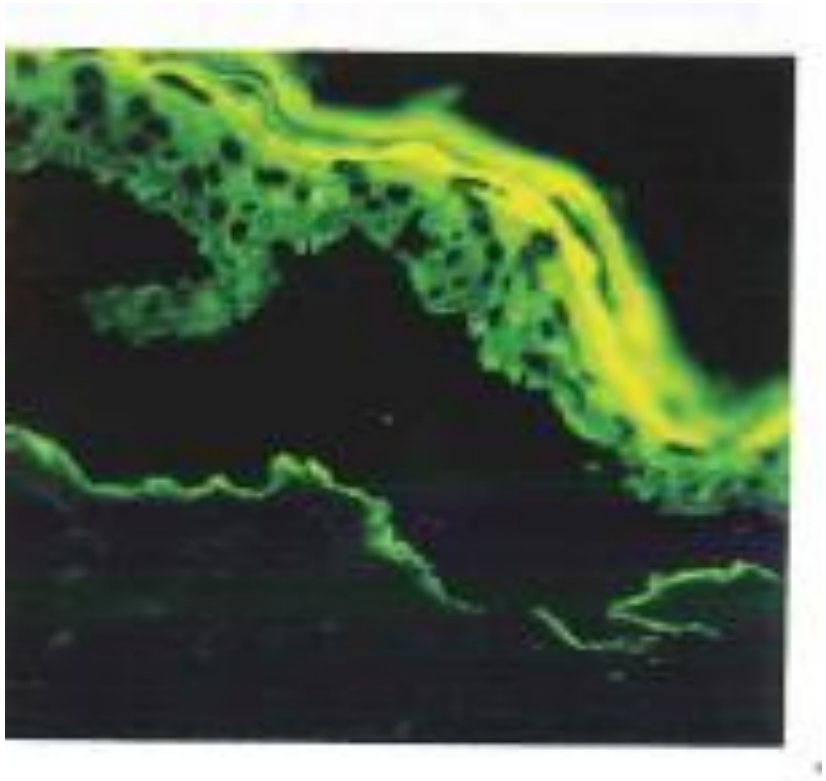


Linear C3 deposition at the dermoepidermal junction

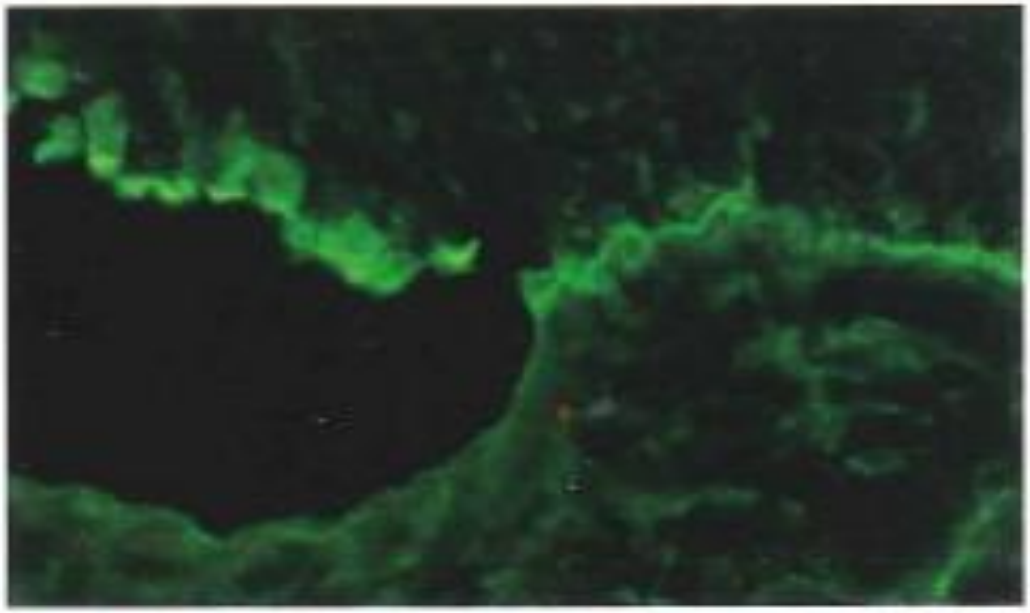
Epidermolysis Bullosa Acquisita (EBA): pathogenesis

- Autoimmunity to type VII collagen, a major component of the anchoring fibrils
- Antibodies to the carboxyl terminal region of type VII collagen
- The split usually occurs in the superficial dermis below the lamina lucida





Salt split skin: EBA



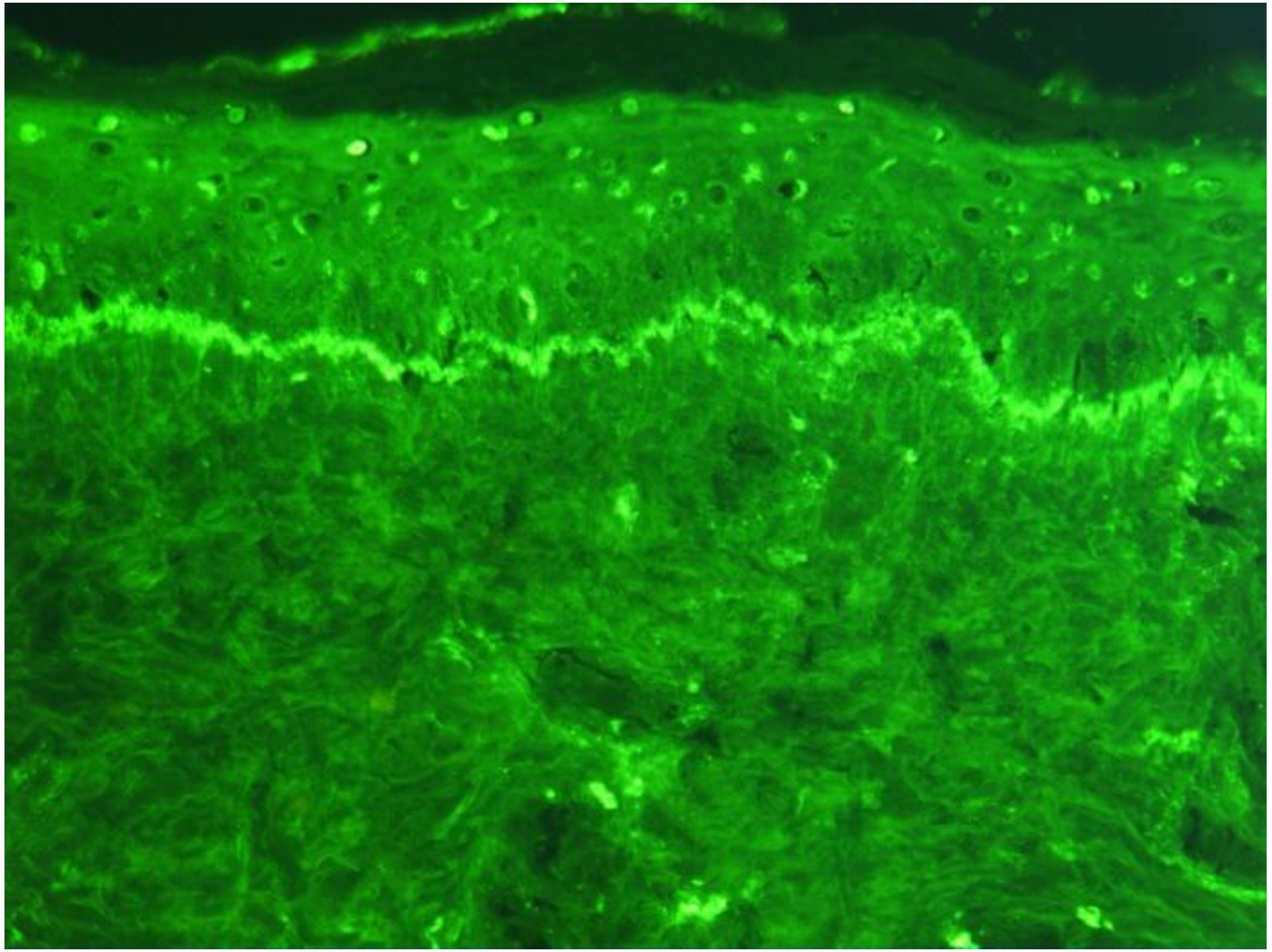
Salt split skin: bullous pemphigoid

Epidermolysis Bullosa Acquisita (EBA):practical tips

- Noninflammatory subepidermal blister should prompt consideration
- Blisters tends to be on trauma prone areas
- No festooning of dermal papillae like in porphyria cutanea tarda

Case 3

- Male
- 78 y
- Multiple large tensed bullae abdomen on a slightly erythematous skin

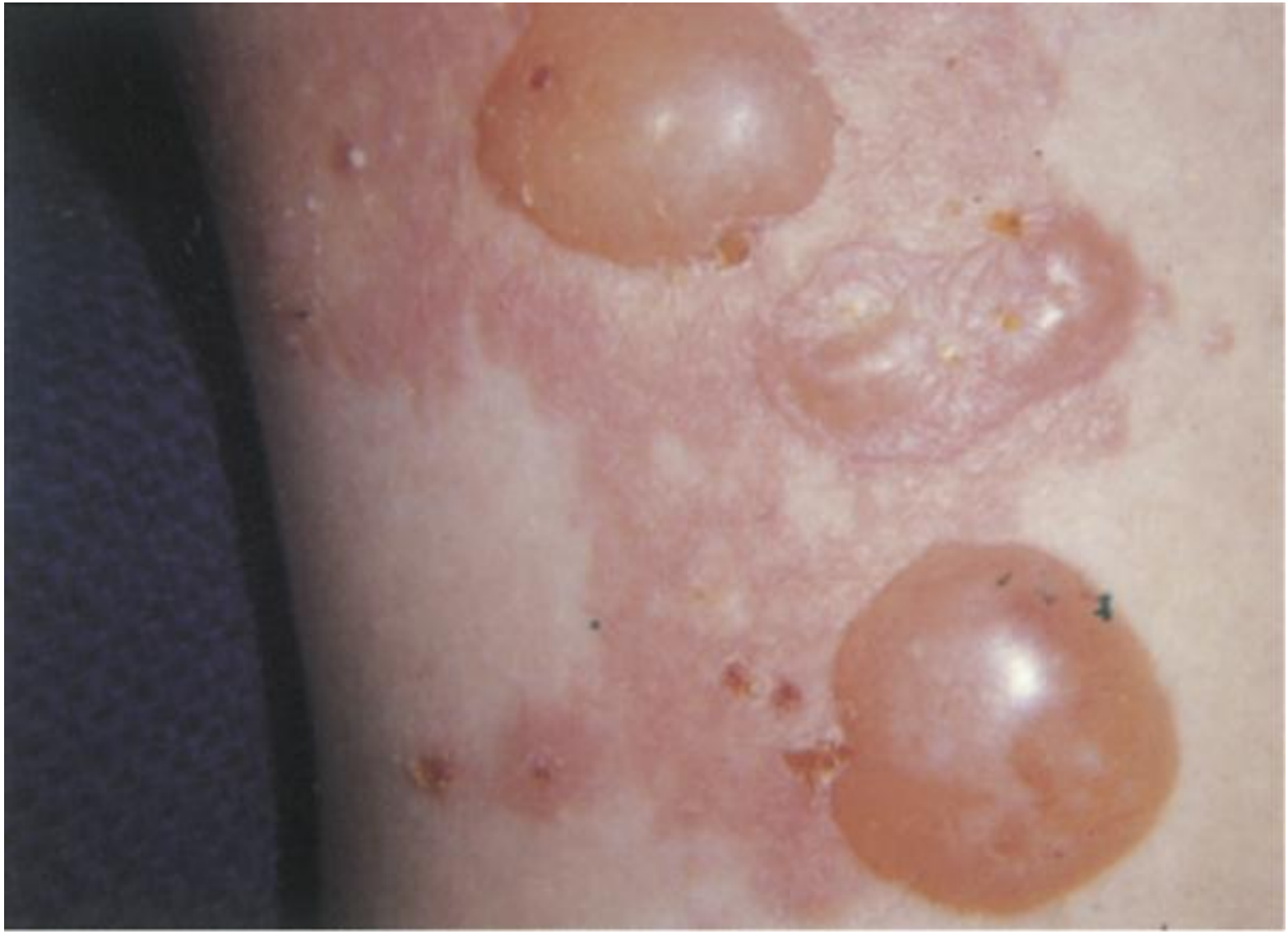


DIF: C3 deposition

Cell-poor variant of bullous pemphigoid

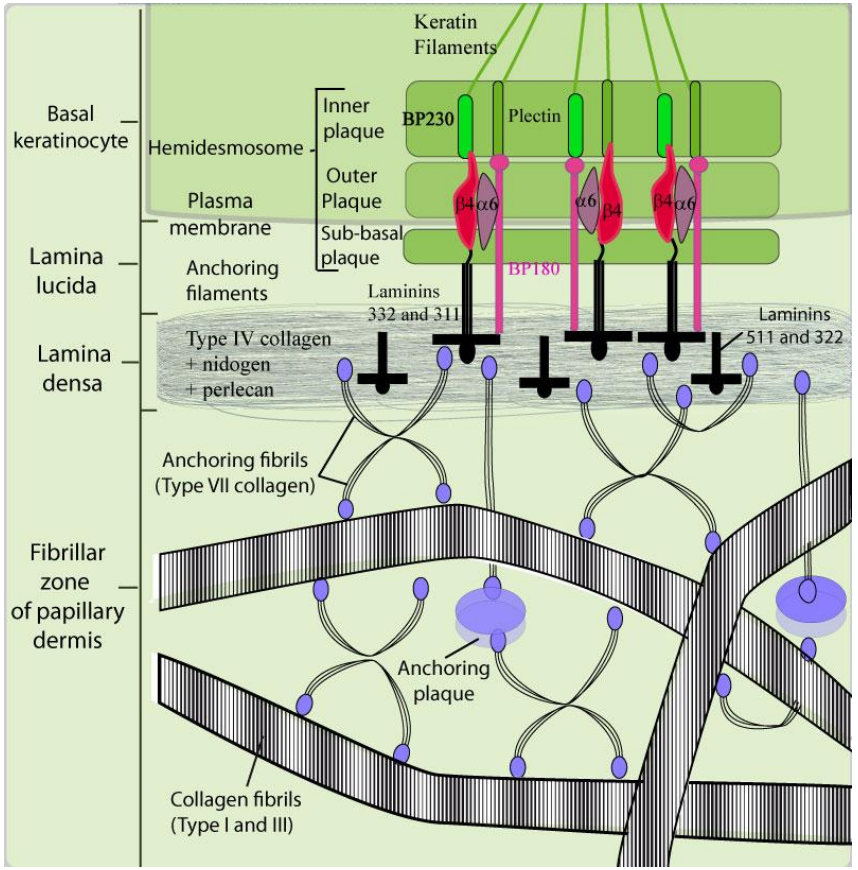
Bullous pemphigoid

- Chronic subepidermal blistering disease
- Occurs primarily in the elderly
- Most common subepidermal bullous disease (annual incidence 7:1000000) (80% of all subepidermal autoimmune bullous diseases)
- Multiple tense bullae of varying size developing on normal or erythematous skin
- Lower part of the abdomen, groins, flexor surface of the arms and legs
- Oral lesions (in 10-40% of cases), involvement of other mucosal surfaces is rare



Bullous pemphigoid: pathogenesis

- Autoantibodies to a transmembrane antigen associated with the lamina lucida and the hemidesmosomes of the basal keratinocytes (“bullous pemphigoid antigen”)
- BP230(BPAg1) and BP180 (BPAg2)

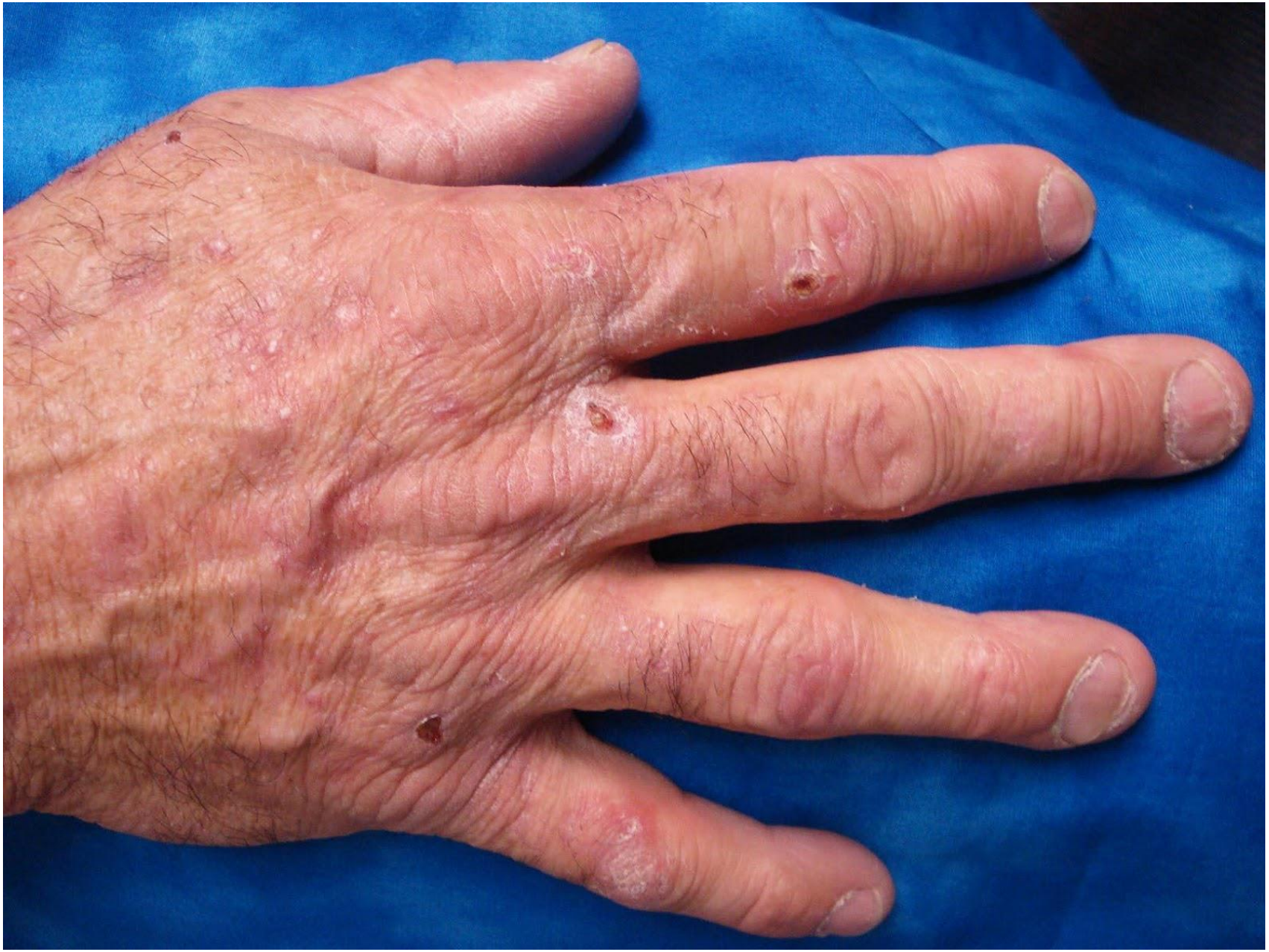


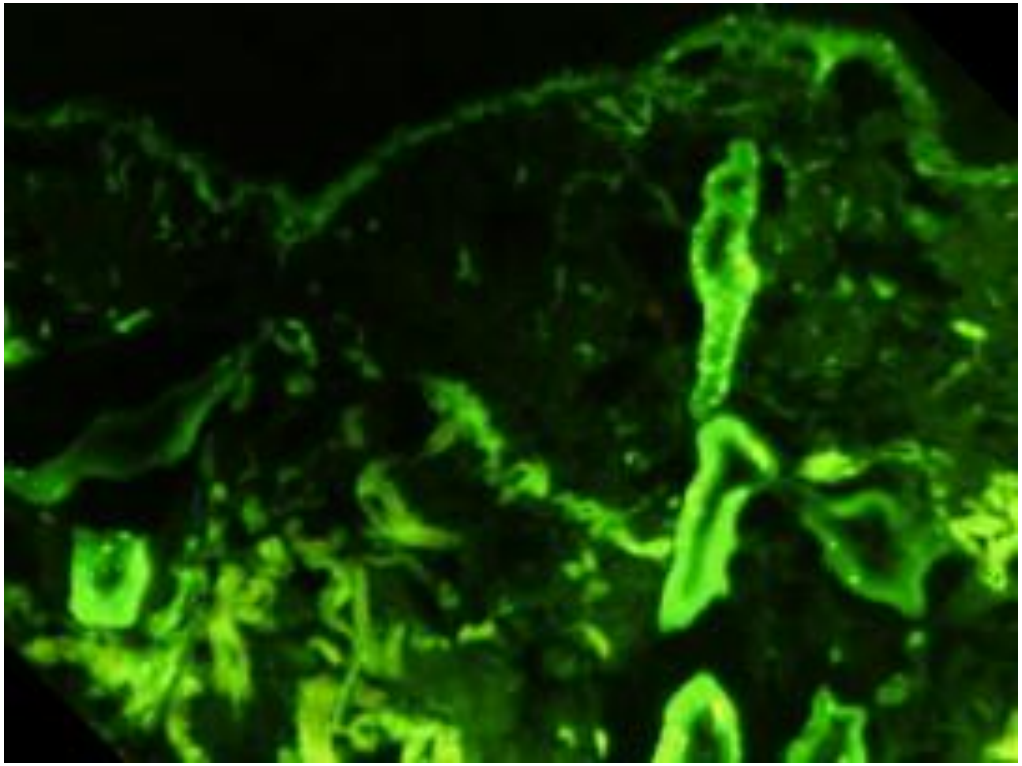
Cell-poor variant of bullous pemphigoid

- If a biopsy is taken from a bullous lesion in BP which do not have an erythematous base→the lesion will often have few inflammatory cells in the bulla

Case 4

- Male
- 54 y
- Multiple erosions and vesicles on the dorsum of the hands





DIF:IgG deposits in and around the upper dermal vessels

Porphyria cutanea tarda (PCT)

Porphyria cutanea tarda: clinics

- Commonest form of porphyria in Europe and North America
- Prevalence 1:5000 to 1:25000 people
- Three forms can be distinguished: sporadic (type I), familial (type II), hepatoeryhropoietic porphyria
- Abnormalities in the biosynthesis of heme leading to the increased production of various porphyrin precursors
- Etiologically diverse group that share in common reduced activity of uroporphyrinogen decarboxylase (UROD) (an enzyme which catalyzes the sequential decarboxylation of uroporphyrinogen to coproporphyrinogen

Porphyria cutanea tarda: clinics

Sporadic form

-only the hepatic activity of UROD is decreased

-adult patients

-no clinical evidence of porphyria cutanea tarda is found in other members of the patient's family

-in addition to the inherited enzymatic defect, an acquired damaging factor to liver function is needed (ethanol, estrogens)

Porphyria cutanea tarda: clinics

Familial form

-in addition to the hepatic activity, the extrahepatic activity of UROD is decreased

-may occur at any age, including childhood

-often there is family history of overt porphyria cutanea tarda

Hepatoerythropoietic form

-very rare

-skin lesions appear in childhood

-activity of UROD in all organs is decreased to less than 10% of normal

Porphyria cutanea tarda: clinics

- Blisters mainly arising on the dorsa of the hands (sometimes on the face) (predominantly on light-exposed areas)
- Combination of sun exposure and minor trauma
- The skin of the face and dorsa of the hands often are thickened and sclerotic
- Hypertrichosis of the face is common
- Evidence of hepatic cirrhosis with siderosis is regularly present (generally mild in sporadic forms) (increased risk of developing hepatocellular carcinoma)

Porphyria cutanea tarda: histology

- subepidermal blister
- festooning of dermal papillae
- thick-walled papillary dermal blood vessels highlighted by a PAS stain (presence of lightly eosinophilic hyaline material in and around small vessels in the upper dermis)
- “caterpillar bodies” (deposition of basement membrane material, PAS+ and COL IV+) adjacent to the epidermis in the roof of the blister (relative specific for PCT but present in less than 50% of cases)
- Focal hemorrhage sometimes present in the upper dermis
- DIF: deposits of IgG and (less commonly) IgM and complement in and around the upper dermal vessels

pseudoporphyria

- Phototoxic bullous dermatosis which resembles PCT
- But normal levels of porphyrins in serum, urine and feces
- Drug induced pathology
- In patients with chronic renal failure undergoing hemodialysis
- “therapy-induced bullous photosensitivity”
- Histology: cell-poor subepidermal bulla, festooning of dermal papillae less pronounced

Case 5

- Male
- 59 y
- Vesiculobullous eruption both arms, some large tense bullae

Bullous drug reaction

Bullous drug eruption

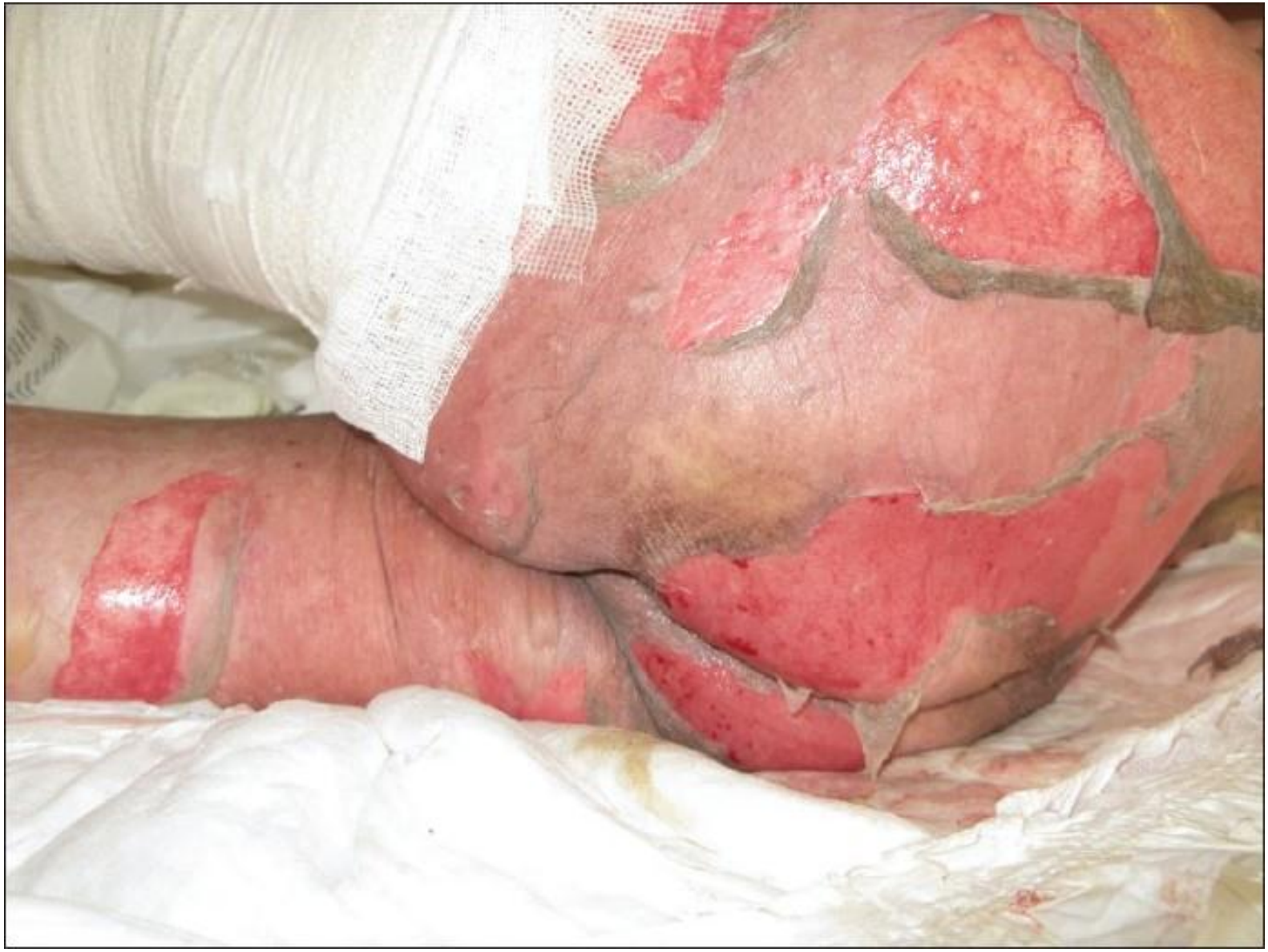
- Vesiculobullous eruption which resembles bullous pemphigoid both clinically and histologically
- Second generation quinolones (such as ciprofloxacin and lomefloxacin)
- The reaction is often photoexacerbated

Table 6.3 Drugs causing vesiculobullous and pustular reactions

Subcorneal pustular dermatosis-like: amoxicillin, cephalosporins, dapsone, diltiazem, gefitinib, isoniazid, paclitaxel, quinidine
Acute generalized exanthematous pustulosis: acetaminophen (paracetamol), allopurinol, amoxicillin, amoxicillin-clavulanic acid, amphotericin B, antimalarials, azathioprine, bamifylline, ceftriaxone, cefuroxime, cephalexin, chemotherapy drugs, chloramphenicol, chloroquine, chromium picolinate, clindamycin, cimetidine, ciprofloxacin, clemastine, cytarabine, dalteparin, diltiazem, doxycycline, enalapril, erythromycin, famotidine, gentamicin, hydrochlorothiazide, hydroxyzine, hydroxychloroquine, ibuprofen, icodextrin, imipenem, itraconazole, lansoprazole, levofloxacin, mercury, metronidazole, morphine, nifedipine, nimesulide, nystatin, olanzapine, penicillin, pentoxifylline, phenytoin, pholcodine, piperacillin/tazobactam, prednisolone, pristinamycin, proguanil, propafenone, prostaglandin E_1, pseudoephedrine, quinidine, 'recreational' drugs, roxithromycin, sennoside, simvastatin, teicoplanin, terbinafine, thalidomide, thallium, ticlopidine, trimethoprim-sulfamethoxazole, vancomycin
Pemphigus foliaceus and erythematosus: aspirin, bucillamine, captopril, ceftazidine, cephalosporins, enalapril, fosinopril, gold, heroin, imiquimod, levodopa, methimazole, penicillamine, propanolol, pyritinol, ramipril, rifampin (rifampicin), tetanus vaccination, thiol-containing drugs, thiopronine
Pemphigus vulgaris and vegetans: ampicillin, anthrax vaccine, captopril, cilazapril, ciprofloxacin, cocaine snorting, diclofenac, dipyrone, enalapril, fosinopril, heroin, hydroxychloroquine, influenza immunization, interleukin-2, ketoprofen, nifedipine, norfloxacin, penicillamine, penicillin, phenols, quinapril, rifampin (rifampicin), tannins, tetanus and diphtheria vaccine, thiol-containing foods, typhoid immunization
Subepidermal (cell poor) – pseudoporphyria: acitretin, amiodarone, ampicillin-sulbactam, aspirin, β-lactams, bumetanide, cefepime (?), celecoxib, chlorthalidone, ciprofloxacin, cola consumption, contraceptive pill, cyclosporine (ciclosporin), etretinate, 5-fluorouracil, flutamide, furosemide (frusemide), hemodialysis, isotretinoin, ketoprofen, mefenamic acid, nabumetone, nalidixic acid, naproxen, oxaprozin, pravastatin, pyridoxine, rofecoxib, sulfonamides, tanning beds, tetracyclines, UVB phototherapy, voriconazole
Subepidermal (lymphocytes ± eosinophils – erythema multiforme/TEN): acarbose, allopurinol, amifostine, aminopenicillins, bezafibrate, carbamazepine, ceftazidime, chloroquine, cimetidine, ciprofloxacin, clindamycin, clobazam, clonazepam, cocaine, cyclophosphamide, cytosine arabinoside, diacerein, doxycycline, ethambutol, etretinate, famotidine, gemepros:, griseofulvin, indapamide, indomethacin, isoxicam, lamotrigine, latanoprost eye drops, mefloquine, methotrexate, mifepristone, nevirapine, nitrogen mustard, nystatin, oxaprozin, phenylbutazone, phenytoin, piroxicam, ranitidine, ritodrine, sertraline, sulfamethoxazole, suramin, terbinafine, theophylline, ticlopidine, trichloroethylene, trimethoprim, valproic acid, vancomycin
Subepidermal (eosinophils) – bullous pemphigoid: 5-aminosalicylic acid, ampicillin, antipsychotic drugs, bumetanide, captopril, cephalexin, chloroquine, ciprofloxacin, doxazosin, enalapril, enoxaparin, fluorouracil (topical), fluoxetine, furosemide (frusemide), gabapentin, ibuprofen, influenza immunization, levobunolol (ophthalmic), lisinopril, losartan, neuroleptics, nifedipine, novoscabin, penicillamine, penicillin and derivatives, serratiopeptidase, sulfasalazine, tetanus immunization
Subepidermal (neutrophils) – linear IgA bullous dermatosis: acetaminophen (paracetamol), amiodarone, amoxicillin, ampicillin/sulbactam, atorvastatin, captopril, carbamazepine, cefamandole, ceftriaxone, diclofenac, furosemide (frusemide), glibenclamide, interleukin-2, lithium carbonate, metronidazole, naproxen, penicillin, phenytoin, piroxicam, sodium hypochlorite (contact), sometostatin, trimethoprim-sulfamethoxazole, vancomycin
Subepidermal (scarring) – mucous membrane pemphigoid: azathioprine, clonidine, practolol
Subepidermal (vasculitis): some of the drugs producing a leukocytoclastic vasculitis (see Ch. 8) may result in blister formation, but this is not a consistent feature of any particular drug
Subepidermal (necrosis) – drug overdose-related bullae: amitryptyline, barbiturates, carbamazepine, clobazam, diazepam, heroin, imipramine, methadone, morphine

Case 6A

- Female
- 74 y
- Tender generalized erythema
- Extensive blistering with shedding of the skin (buttocks and thigh)



Toxic epidermal necrolysis (TEN)

Toxic epidermal necrolysis (TEN)

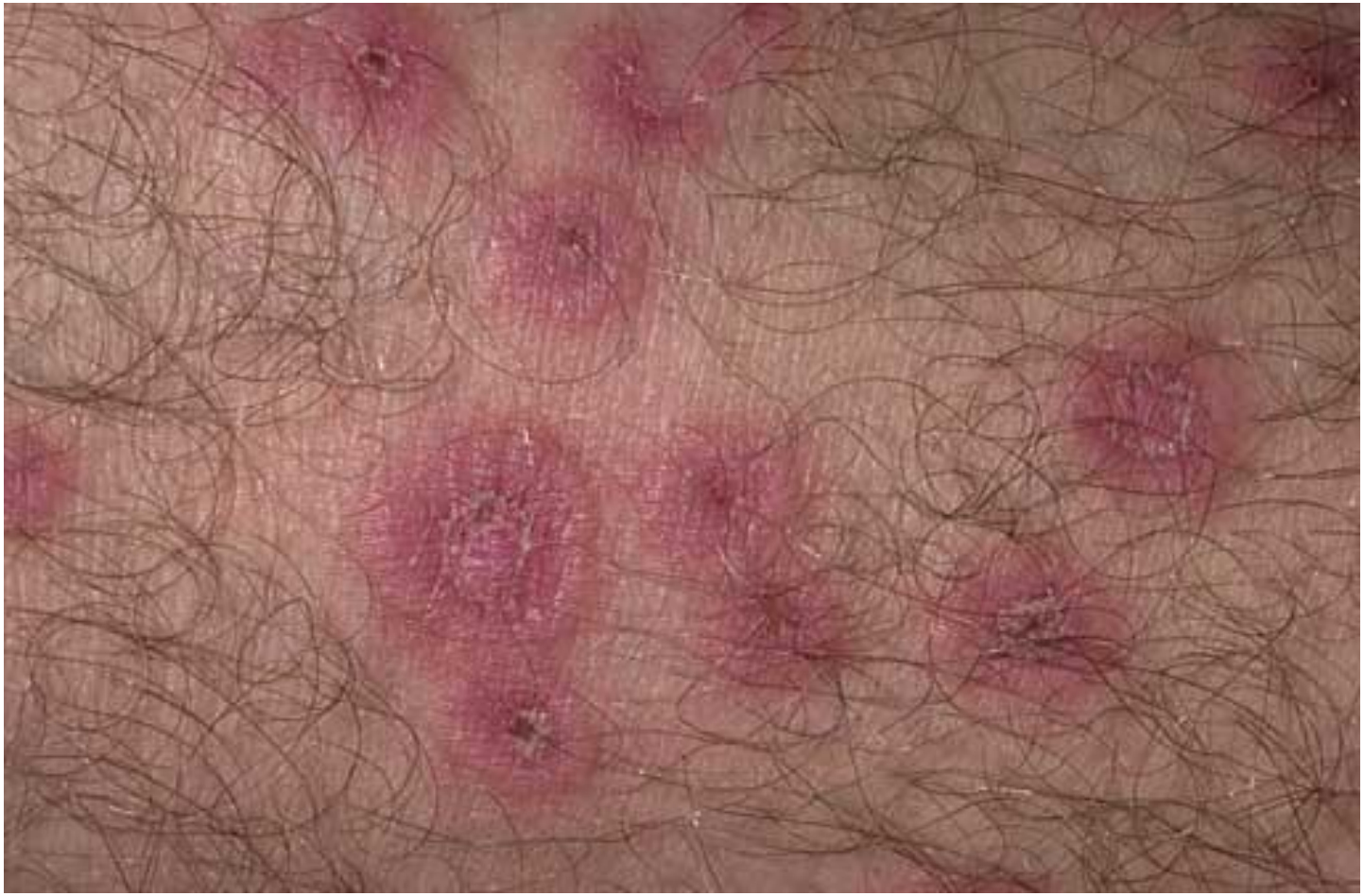
- Most severe form of an erythema multiforme spectrum
- Generalized tender erythema which rapidly progresses to a blistering phase with extensive shedding of the skin
- Etiology: drugs in the majority of cases.
- Histology: subepidermal bulla with confluent necrosis of the overlying epidermis, the perivascular infiltrate of lymphocytes, if present at all, is usually sparse

TEN/Stevens-Johnson syndrome

- Stevens-Johnson syndrome:mucosal erosions and epidermal detachment below 10% of total body area
- Stevens-Johnson syndrome/toxic epidermal necrolysis overlap: epidermal detachment between 10 and 30%
- Toxic epidermal necrolysis: epidermal detachment more than 30%

Case 6B

- Male
- 44 y
- Symmetrical erythematous macules and papules on both legs with focal bulla formation



Vesiculobullous lesion in erythema multiforme

Vesiculobullous erythema multiforme

- Result from damage to the basal cells of the epidermis (“interface type dermatitis”)
- Histology:

-subepidermal blister

-mild to moderately heavy infiltrate of lymphocytes in the underlying dermis

-the epidermis overlying the blister may show necrosis

-apoptotic keratinocytes are usually present in the epidermis adjacent to the blister !

Case 7

- Female
- 61 y
- Multiple itchy, burning tense bullae at the scalp
- Gingival erosions

Mucous membrane pemphigoid

Mucous membrane pemphigoid

- Formerly referred to as “cicatricial pemphigoid”
- Uncommon, chronic, auto-immune vesiculobullous disease
- Predilection for oral and ocular mucous membranes
- Tendency for the lesions to scar
- Mouth is the most frequent site of onset (involved in 85% of cases)
- Skin lesions (25% of cases, only in 10% initial site of involvement)

Mucous membrane pemphigoid: histology

- Subepidermal blister
- Often features of erosions or ulcers lined by granulation tissue showing non-specific acute or chronic inflammation
- Variable infiltrate of cells in its base

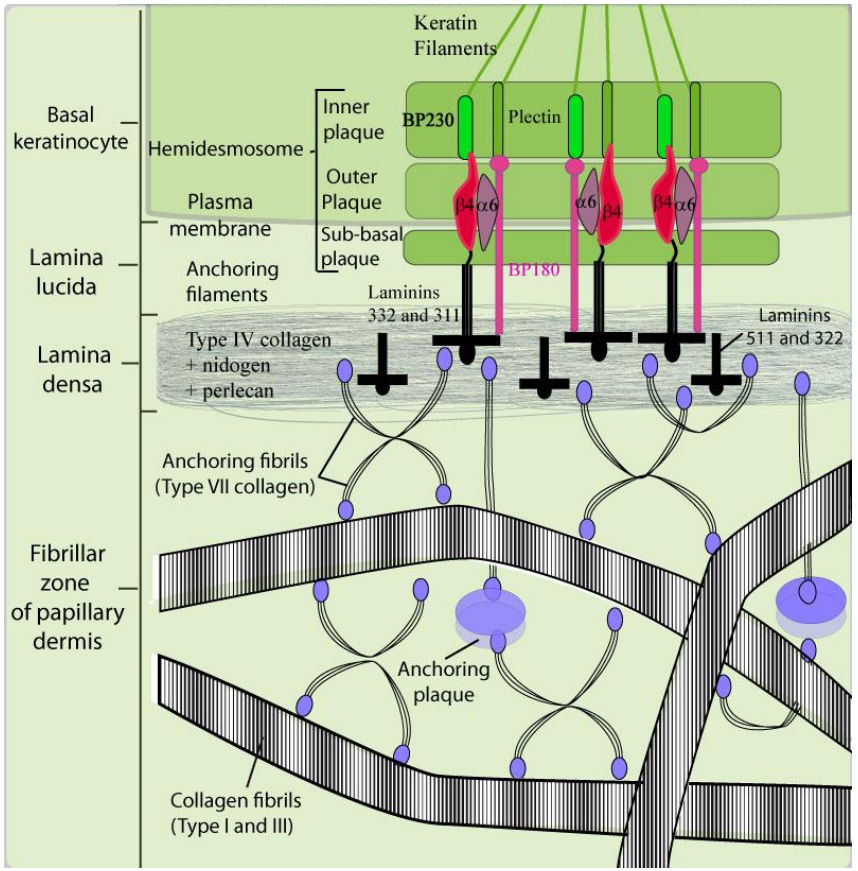
  -neutrophilic microabcesses in dermal papillae (DH-like) (acute lesions, <48 hours)

  -increasing numbers of lymphocytes and reducing number of eosinophils, scarring (older lesions)

DIF: linear deposit of IgG and C3 at the basement membrane (like bullous pemphigoid)

Mucous membrane pemphigoid: pathogenesis

- Autoantibody production to different desmosomal proteins
- Antibodies to BP180 (BPAg2) and Epligrin (laminin 332)



Case 8

- Male
- 16 y
- IC: severe ill patient (sepsis), chemotherapy for Ewing sarcoma
- Large bullae at the extremities

Bullous acute vasculitis

Bullous acute vasculitis

- (hemorrhagic) subepidermal bullae
- The vessels in the underlying dermis show typical features of an acute vasculitis
- Etiology: bullous lesions associated with toxic shock syndrome and septicemia (Vibrio vulnificus, E. coli, Yersinia enterocolitica, Morganella morganii)

Case 9

- Neonate
- Macular scarlatiniform eruption followed by blistering.
- Fever, irritability and skin tenderness
- Mocous mebranes not affected

Staphylococcal “scalded skin” syndrome (SSSS)

SSSS

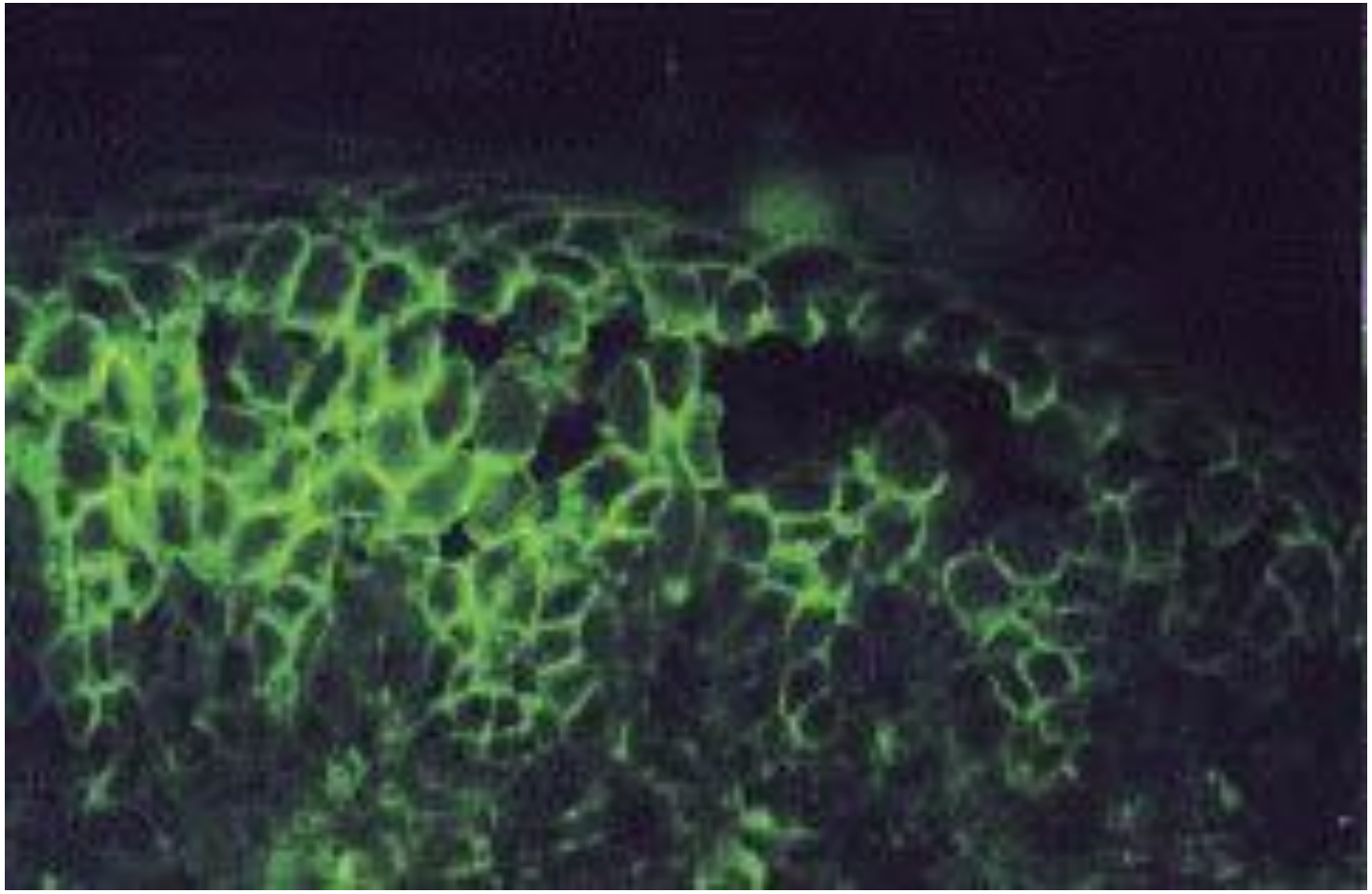
- Results from the production of an epidermolytic toxin by certain strains of Stapylococcus aureus, cleaving the extracellular domain of desmoglein 1.
- Histology:

-a thin layer of normal stratum corneum forms the roof of the blister

-usually only a sparse inflammatory cell infiltrate in contrast to bullous impetigo and pemphigus foliaceus in which the infiltrate is usually heavier)

Case 10

- Male
- 48 y
- Pruritic pustular eruption axillae



DIF: IgA deposits intracellular squamous cells

IgA pemphigus

IgA pemphigus

- Pruritic pustular eruption, flaccid pustules that arise on a erythematous base and often appearing in an annular arrangement (pustular rather than bullous or vesicular lesions)
- Most common sites of involvement: axilla an groins (trunk, proximal extremities, lower abdomen)
- Mucous membrane involvement is rare
- Clinical findings very similar to those in pemphigus foliaceus and subcorneal pustular dermatose (Sneddon-Wilkinson)
- Dapsone-responsive variant

IgA pemphigus

- Two histological types
- *Subcorneal pustular dermatosis type*: subcorneal vesicopustules or pustules with variable but usually mild acantholysis and some intraepidermal neutrophils
- *Intraepidermal neutrophilic dermatosis type*: intraepidermal vesicopustules of pustules
- DIF: IgA deposition in the squamous intercellular substance throughout the epidermis

IgA pemphigus: pathogenesis

- Autoantibody production to different desmosomal proteins
- SPD variant: antibodies to desmocollin 1
- IEN variant: antibodies to Dsg1 en Dsg3

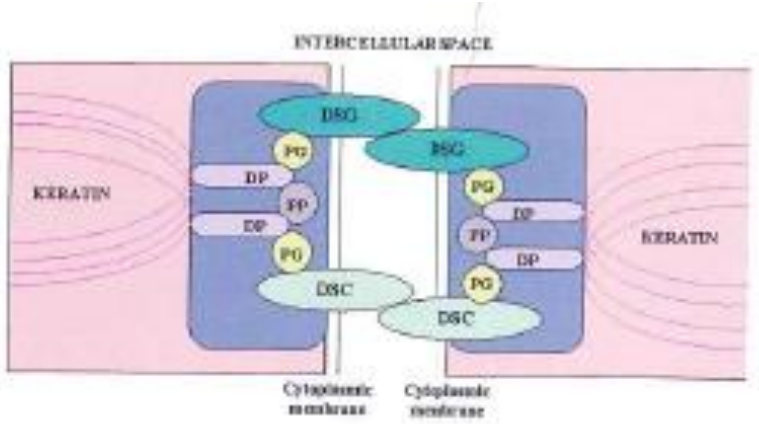


FIGURE 9-8. The desmosome. The desmosome complex includes desmogleins and desmocollins as transmembrane components, and plakoglobin, plakophilin, and desmoplakin as cytoplasmic components. The cytoplasmic domains of desmoglein and desmocollin associate with plakoglobin, which links intermediate filaments (keratin) to the desmosome through desmoplakin.

IgA pemphigus: differential diagnosis

- Subcorneal pustular dermatosis (Sneddon-Wilkinson) (DIF for differentiation)
- Pustular psoriasis
- Bullous impetigo
- Pemphigus (foliaceus)
- Pustular drug eruption (e.g. AGEP)

Case 11

- Female
- 41 y
- Symmetrical erythematous pustules foot soles

Palmoplantar pustulosis

Palmoplantar pustulosis

- Chronic inflammatory skin disorder
- Erythematous, scaly plaques with recurrent sterile pustules, symmetricaly distributed on the palms and soles
- Onset usually between the ages of 40 and 60 years
- Women are predominantly affected
- Pathogenesis?

-form of psoriasis? (psoriasis is present in 10% of cases; but there are no clear associations with any particular HLA-type)

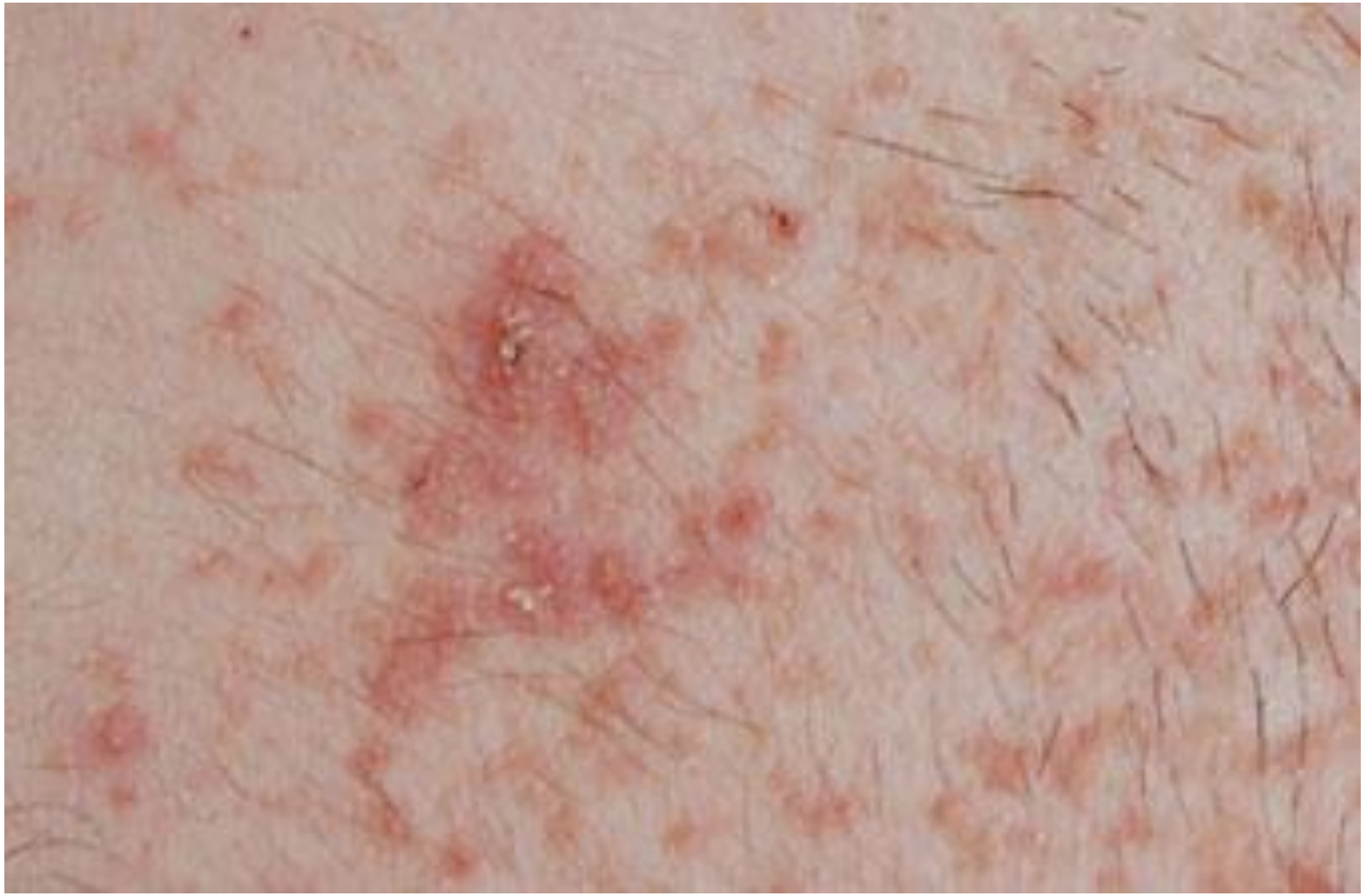
-distinct clinopathological entity? (probably with an immunological pathogenesis)

Palmoplantar pustulosis: histology

- Intraepidermal vesicle/bulla
- Unilocular, well-delimited pustule within the epidermis and extending to the undersurface of the stratum corneum
- Overlying focal parakeratosis
- Mixed perivascular and diffuse infiltrate of inflammatory cells in the dermis

Case 12

- Male
- 14 y
- Multiple tiny hyperkeratotic brown papules at the back of the neck



M. Darier

M. Darier

- “keratosis follicularis”
- Rare hereditary disorder, characterized by abnormal keratinocyte adhesion
- Usually presents in the first or second decade (with a peak around puberty)
- Often follows exposure to ultraviolet light
- Long-term ilness, remissions do not occur, although some patients show improvement with increasing age

M. Darier

- Crusted, keratotic yellow-brown papules and plaques found particularly on the seborrhoic areas of the body
- Bullous lesions rare (following sun exposure)
- Histology:

-hyperkeratosis and papillomatosis, keratin plug

-acantholysis with suprabasal cleft formation

-dyskeratosis (corp ronds en grains)

“corp rond”

- Although acantholytic dyskeratosis in association with corps ronds is highly characteristic of Darier’s disease, corps ronds can occur in several other conditions like warty dyskeratoma, Hailey-Haily and m. Grover

m. Darier: differential diagnosis

- Hailey-Hailey disease (familial benign pemphigus) (more pronounced acantholysis, less dyskeratosis)
- M. Grover disease (transient ancantholytic dermatose) (Hailey-Hailey-like pattern, Darier-like pattern, pemphigus-like pattern, eczema spongiotic-like pattern; clinical presentation different from m. Darier!: self-limiting, more in elderly)
- Pemphigus vulgaris (foliaceus)
- Acantholytic solar keratosis

→it is important to have clinical information for a definitive diagnosis

→IF studies can be helpfull to exclude pemphigus