

Oral Ulceration

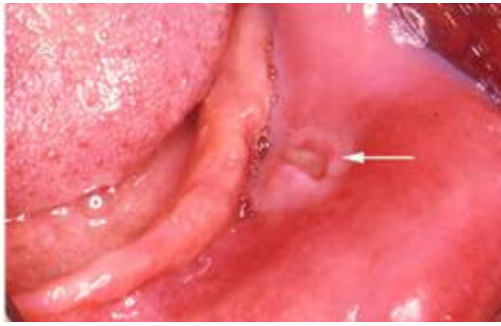
• **Classification:**

1. **Infective:**
2. **Traumatic:**
3. **Idiopathic:** Recurrent Aphthous Stomatitis (**RAS**)
4. **Associated with systemic disease:**
 - Hematological
 - GIT
 - Behcet's
 - HIV
5. **Associated with dermatological diseases:**
 - Lichen planus
 - Chronic discoid LE
 - Vesiculobullous diseases
6. **Neoplastic: SCC & others**

Traumatic Ulcers

- **Mechanical:** causes, dx tic criteria, hist





- **Chemical:** chemicals, aspirin burn



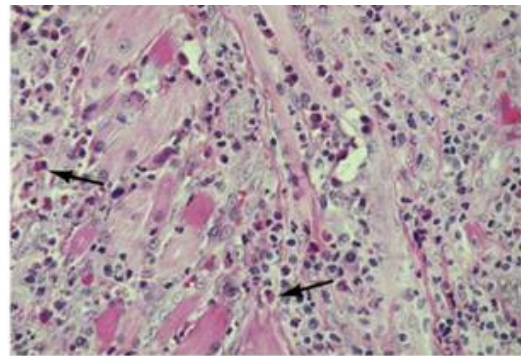
- **Thermal:** palate
- **Factitious:** biting, nails



- **Radiation:** immediate & delayed

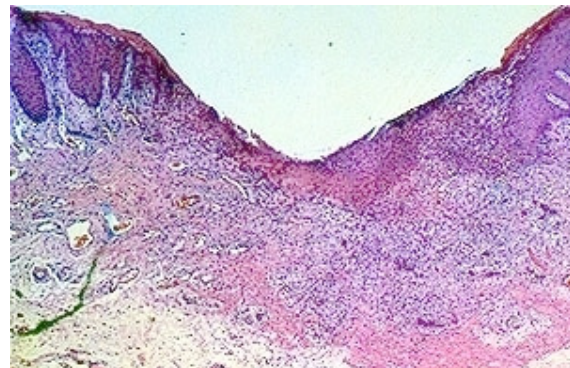


- **Eosinophilic ulcer:** crush injury to muscle



RAS

- Most common
- 10-25%
- Onset
- Gender
- Non-smokers
- Prodromal symptoms
- Diagnosis



- **Clinical forms:**

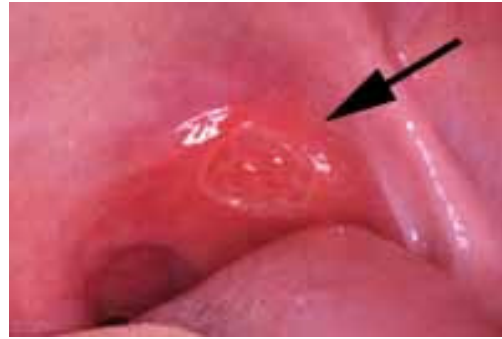
1. **Minor aphthous ulcer:**

- 80%
- < 5 at any one time
- Duration: 10-14 days/ulcer, 3-4 wks/attack
- Intra-oral sites
- **Clinically:** shape, depth, colour & size, symptoms
- **Healing**
- **Recurrence rate:** 1-4 months



2. Major aphthous ulcer

- 2nd most common
- 1-10 but frequently 1-2 at any one time
- **Duration:** 4-6 wks/ulcer
- Intra-oral sites
- **Clinically:** depth, size, symptoms
- Healing
- **Recurrence rate:** < month



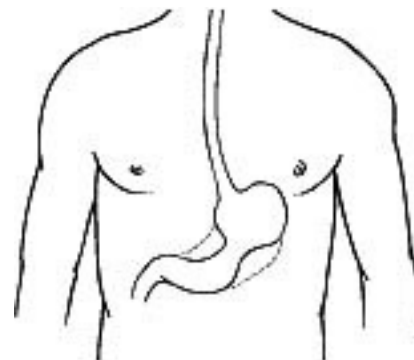
3. Herpetiform ulceration:

- Least common
- 10-100 at any one time
- **Duration:** wks-months
- Intra-oral sites:
- **Clinically:** shape, depth, colour & size, symptoms
- Healing
- **Recurrence rate:** < month



- **Aetiology:** damaging immune response

1. Genetic factors:
2. Hormonal factors:
3. Traumatic factors:
4. Stress:
5. Infective agents:



6. Hematological ↓s:

7. GIT disease:

8. Allergic disorders:

- **Immunological & histological features:**

- Immune mechanism

- Humoral immunity?

- **T-cell reaction:**

- Pre-ulcerative stage: Suprabasal epithelial CS, LP

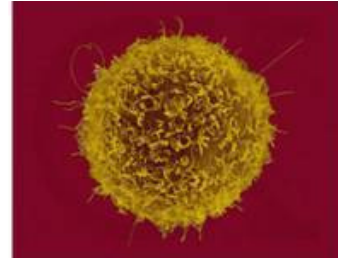
- Lymphoid Cs infiltrate epith

- ↑ Infiltrate & degeneration of epith Cs

- **Pre-ulcerative stage:** CD4: CD8 = 2:1

- **Ulcerative stage:** 1:10

- **Healing stage:** 10:1



Behcet's syndrome

- Aetiology: ?, HLA-B51

- Young adult males

- **Major criteria:**

- RAS

- Genital ulcers

- Uveitis, conjunctivitis, retinitis

- E. nodosum, pustular & macular lesions, Subcutaneous thrombophlebitis

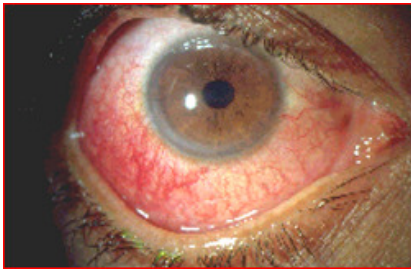
- **Minor criteria**

- Arthralgia

- GIT lesions

- Thrombotic vascular lesions

- CNS lesions



Vesiculobullous diseases

- **Classification:**

- ⇒ **Intraepithelial:**

- **Acantholytic**

- Pemphigus
- Darier's disease (Follicular keratosis)

- **Non-acantholytic**

- Viral infections

- ⇒ **Subepithelial:**

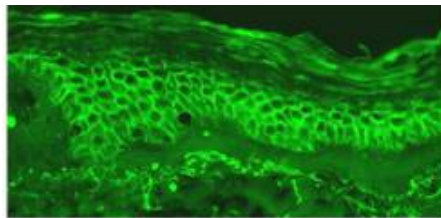
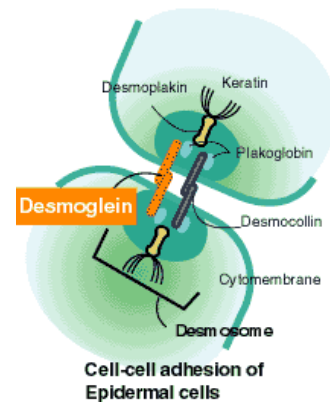
- Erythema multiforme
- Pemphigoid
- Dermatitis herpetiformis
- Epidermolysis bullosa
- Linear IGA disease
- Bullous lichen planus
- Oral blood blisters

Pemphigus Vulgaris



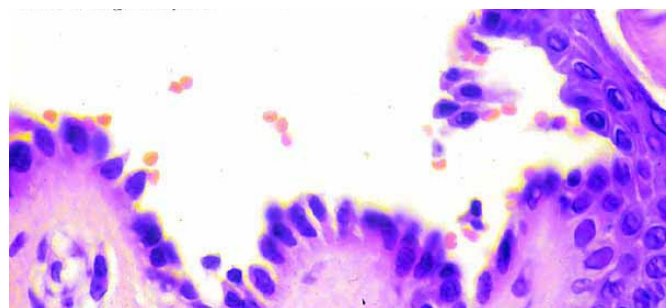
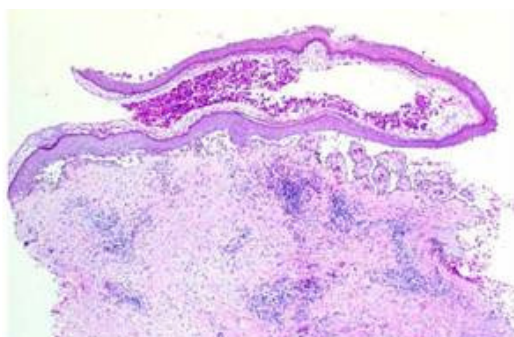
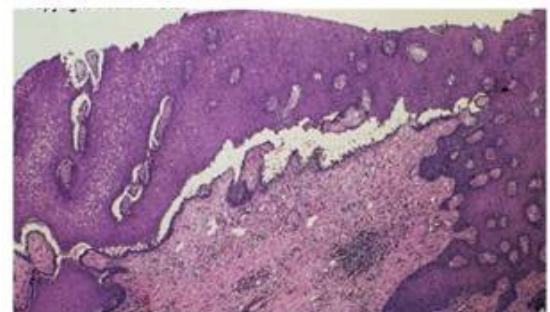
- **Pathogenesis:**

- Autoimmune disease
- IgG to desmosomes (desmoglein III)
- Skin & MMs
- DIF & IDIF: “fishnet” pattern



- **Hist:**

- Mild inflammation in LP
- Cleft-like spaces just above basal cell layer
- Tombstones
- Tzanck cells



- **Clinically:**

- Uncommon

- F, 40-60, Mediterranean



- **Oral lesions:**

- ☛ 50% initial site, ultimately involved in all cases

- ☛ Confined to oral cavity in some pts

- ☛ Soft palate

- ☛ Fragile bullous → painful erythematous superficial erosions w ragged edges

- ☛ Sites of trauma: larger & more symptomatic lesions

- ☛ Nikolsky's sign

- ☛ Fatal



- **Other sites:** nasopharynx, esophagus, vagina can be involved
- **Other forms:** Foliaceous, Vegetans

Erythema Multiforme

- **Clinically:**

- Young adults, M>F
- Abrupt onset
- Prodromal phase
- Wide range of clinical manifestations
- **Mild forms:** oral ± skin or skin alone
- **Skin lesion:** variable, “target” or “iris” lesion, hands & feet
- **Oral lesions:**



- Esp. on lips and ant mouth, erythematous→ vesiculobullous eruptions→ erosions
- Circumoral crusting

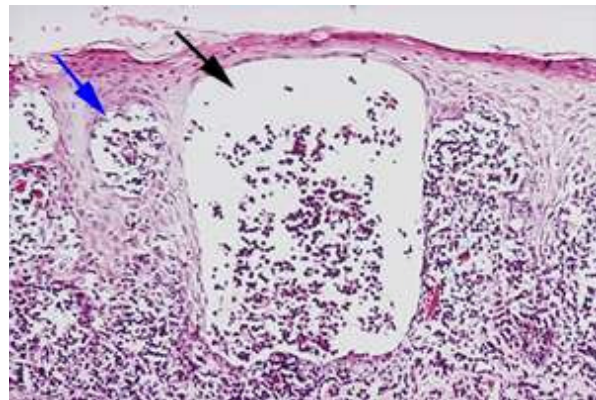
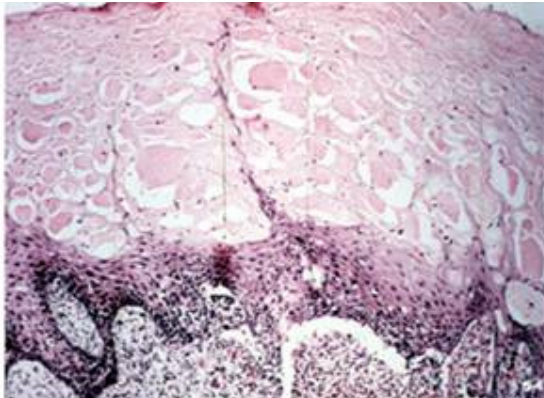


- **Stevens-Johnson syndrome:** widespread involvement
- 10-14 days
- Recurrences

- **Pathogenesis:**

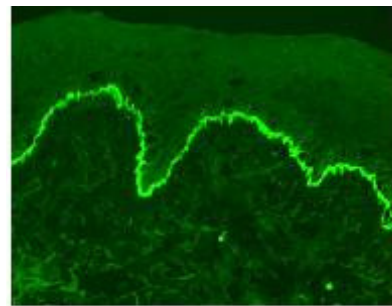


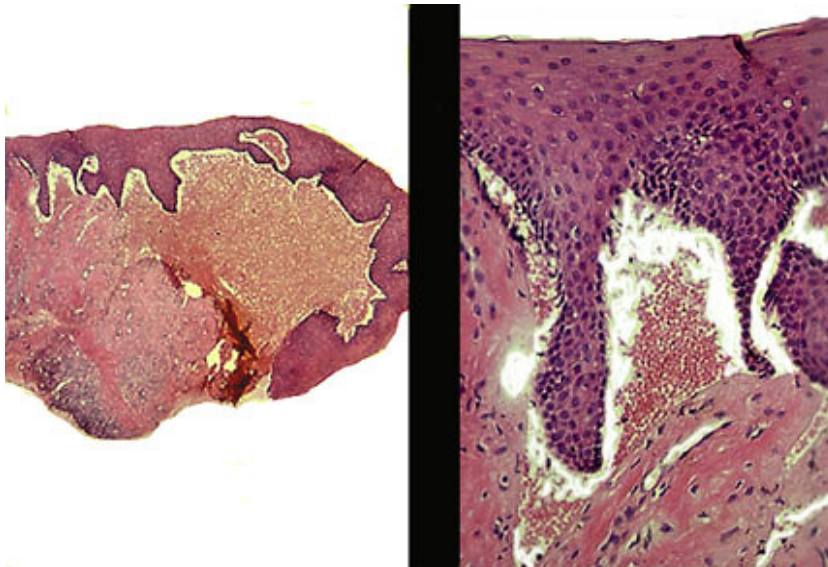
- Unknown, spontaneous
- Precipitating factors: sulphonamides, HS
- **Type III hypersensitivity rxn:**
 - Deposition of immune complexes (IgM & C3) in superficial vessels → ischemia of epith
- **Dx:** clinical, immunological findings are negative or nonspecific
- **Hist:** nonspecific, intraepithelial/subepithelial bullae, necrotic lid, CICI in LP



Pemphigoid

- **Pathogenesis:**
 - Autoimmune disease
 - Linear deposits of IgG & C3 in BM zone
- **Hist:**
 - Subepithelial bullae
 - Starts as focal edema at BM w no inflammation in LP
 - Separation of full thickness of epithelium (Lamina Lucida)
 - Neutrophils & eosinophils in & around bulla, perivascular inflammation in LP





- **Clinically:**

- Elderly, F>M
- Severity
- **Two types:**

- **Bullous Pemphigoid:**

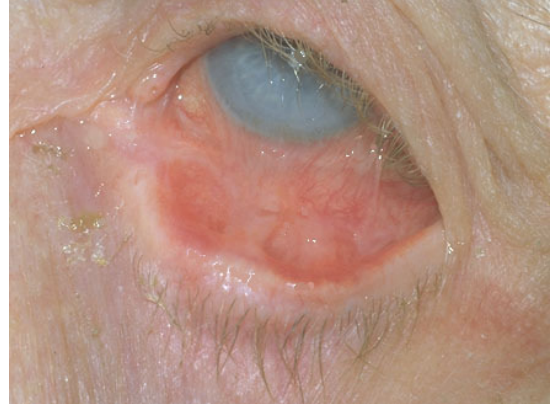
- Skin
- 10-20% oral lesions
- + DIF, + IDIF in 75% of cases



- **Mucous membrane Pemphigoid:**

- **Skin:** uncommon & minimal
- **Oral mucosa:**
 - Almost always affected
 - Usually precede other sites
 - In some cases the only lesions
 - Bullae: tense, tough (remain few days), blood blisters
 - 🩹 → Erythematous areas, well-defined margins, few wks
 - Slowly heal ± scarring (Cicatricial Pemphigoid)
 - Any where, desquamative gingivitis
 - Nasopharynx, larynx & esophagus

- Genital lesions
- Conjunctiva: bullae, erosions → scarring w adhesions (symblepharon)
- + DIF & 80% +IDIF



Dermatitis herpetiformis

- Rare skin disorder
- Itchy rash often over shoulders
- Gluten sensitivity
- Oral lesions

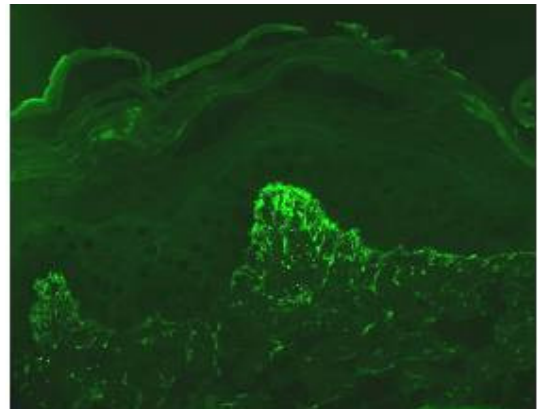
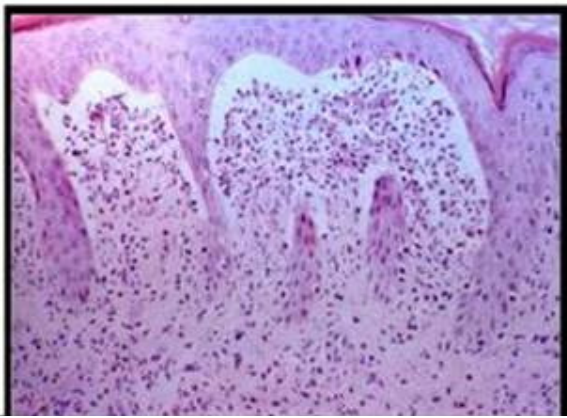


- 70% of cases
- Erythematous, purpuric, vesicular or ulcerative
- Palate, BM, Gingiva



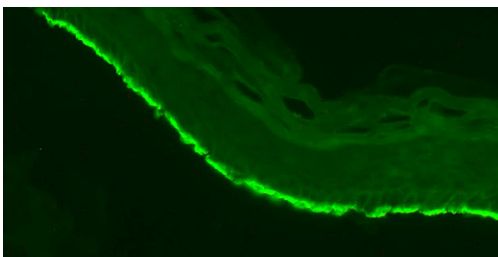
• **Hist:**

- Microabscesses at tips of CT papillae
- **DIF:** granular deposits of IgA & C3 at tips of CT papillae



Linear IgA Disease

- Rare
- Similar to DH but ↓ gluten sensitivity
- **DIF:** Linear deposits of IgA along BM zone
- Lymphoma



Epidermolysis Bullosa

- Separation of the epithelium from underlying CT
- Large blisters → extensive & often immobilizing scar formation
- Three hereditary forms & one acquired form

① EB simplex:

- Intraepithelial bullae
- AD
- Appears during infancy & improving by puberty
- Mild
- Sites of friction or trauma
- Mild intraoral blisters
- Teeth not affected

② Junctional (gravis):

- AR
- Severe form
- Separation within lamina Lucida
- Hgic large bullae involving face, trunk & extremities, loss of nails & scarring
- Extensive involvement of all mucosae
- Severe hypoplasia of teeth

③ Dermolytic (dystrophic) form:

- AD
- Separation beneath the basal lamina
- Lesions apparent at birth
- Sites of pressure → bullae → deep scars → contracture

- Trismus, Ankyloglossia, obliteration of sulci
- Delayed eruption & hypoplasia of teeth

⊕ **EB acquisita:**

- **Autoimmune:** IgG & C3 to type VII collagen of anchoring fibers
- Adulthood
- ≅ Dermolytic type
- DIF: Linear, BM



Oral Blood Blister

(Angina bullosa haemorrhagica, localized oral purpura)

- Spontaneous blood-filled bullae
- Subepithelial 2-3 cm in $\odot \rightarrow$ ulcer
- Palate
- Chocking
- Aetiology?

