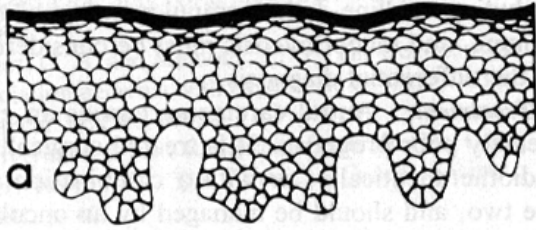


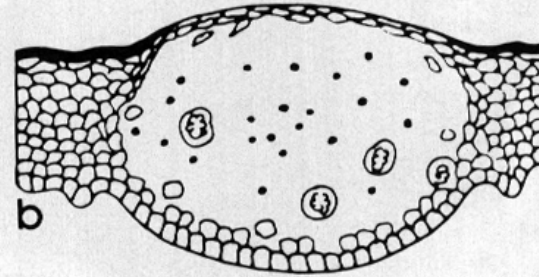
# BULLOUS/EROSIVE & DESQUAMATIVE LESIONS OF ORAL MUCOSA

Basic Mechanisms, Adhesion  
Molecules

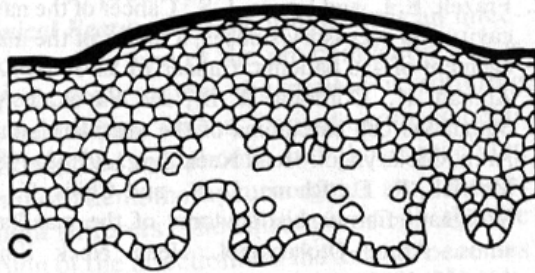




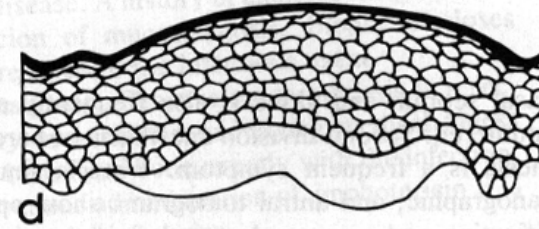
**Normal mucosa**



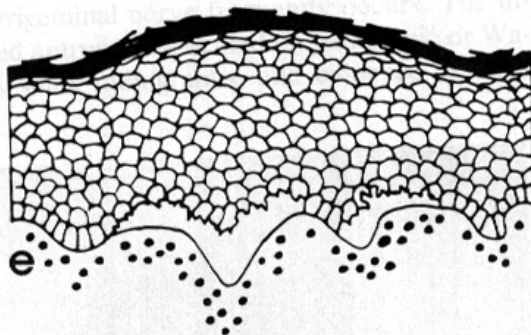
**Intraepithelial viral vesicle**



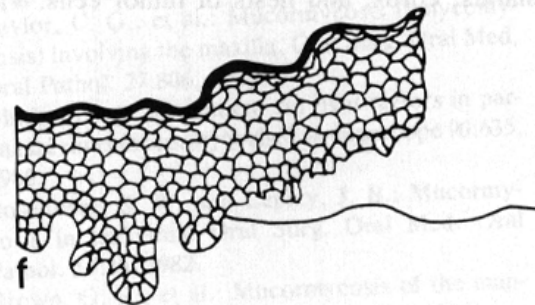
**Suprabasilar bulla**



**Sub-basilar bulla**



**Intrabasilar bulla**



**Erosion desquamation**



# Oral Bullous Diseases

These diseases are immunopathologic, involving autoimmune mechanisms, immune complexes with complement or planted antigens. Most are immunoglobulin mediated, others are T cell mediated



# Oral Bullous/Desquamative Diseases

- Erosive Lichen Planus
- Mucous Membrane Pemphigoid
- Pemphigus Vulgaris
- Erythema Multiforme



# Rare Bullous Diseases

- Paraneoplastic Pemphigus
- Pyostomatitis Vegetans
- Epidermolysis Bullosa
  - Hereditary types
  - Acquisita
- Familial Benign Pemphigus
  - (Hailey-Hailey)



# Mucous Membrane Autoantigens

- DESMOSOMAL PROTEINS
- HEMIDESMOSOMAL PROTEINS
- BASEMENT MEMBRANE ADHESION COMPLEX (BMAC) PROTEINS
- IMMUNE COMPLEXES

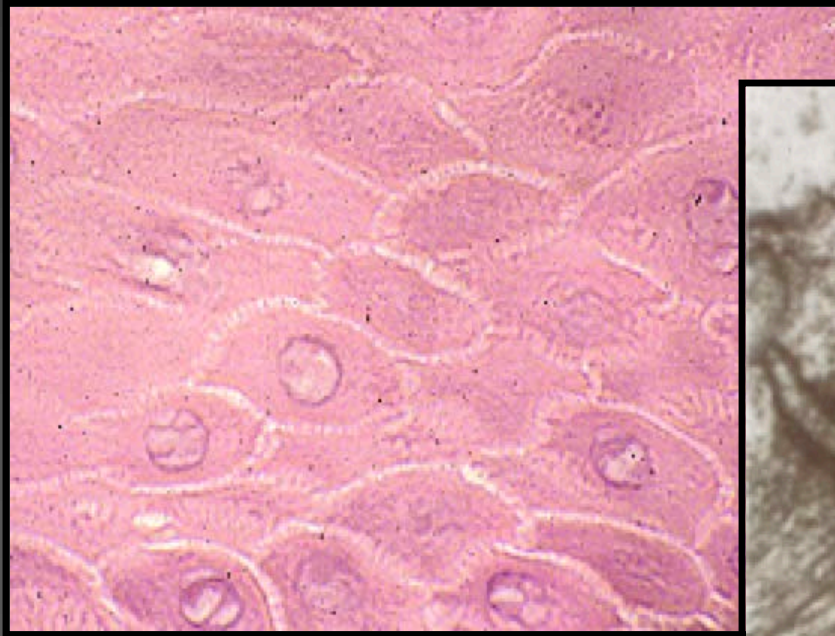


# Target Antigens in Oral Bullous Diseases

- Pemphigus vulgaris (desmosome, Igs)
  - Desmoglein 3
- Bullous Pemphigoid (BMAC, Igs)
  - BP230, Collagen 17
- Mucous Membrane Pemphigoid (BMAC, Igs)
  - BP230, Collagen 17, Laminin 5
- Erythema Multiforme (immune complexes)
  - Sulpha drug haptens, herpes virus antigens
- Paraneoplastic Pemphigus (BMAC, desmosome, Igs)
  - Desmoplakins
- Lichen Planus
  - Keratinocyte Ags, Hg, Ni, Cinnamon (T cell mediated)



# Desmosome





# Desmoglein Ag

## DESMOSOMAL ASSEMBLY

### INTRACYTOPLASMIC INTERMEDIATE FILAMENTS

Actin  
Cytokeratins

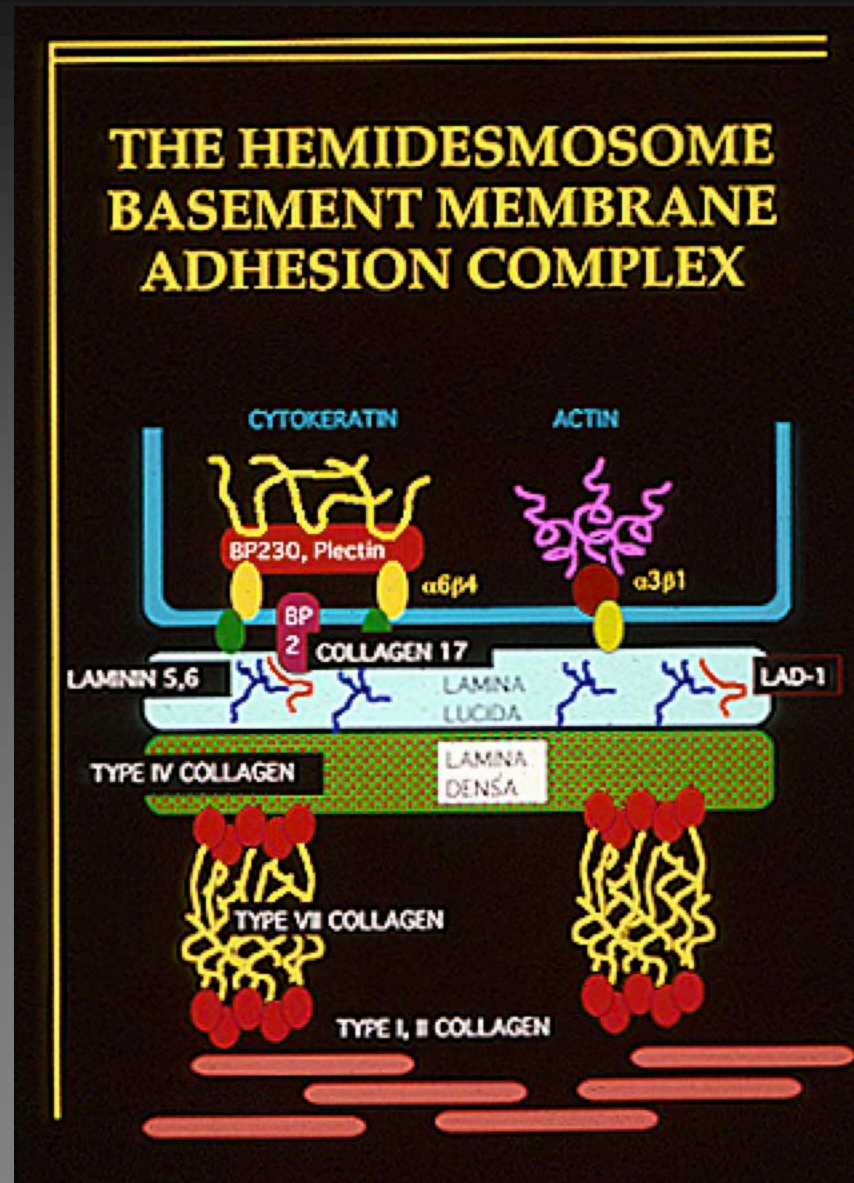
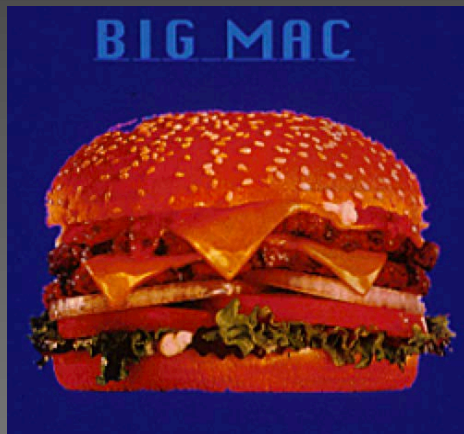
PLAQUE  
Plakoglobin  
 $\beta$ -Catenin

### TRANSCELLULAR

Desmoglein 1 (PFAg)  
Desmoglein 2a (Desmocollin 1)  
Desmoglein 2b (Desmocollin 2)  
Desmoglein 3 (PUAg)



# Basement Membrane Adhesion Complex



# BMAC Diseases

Autoimmune Targets

Immune Complexes

Hereditary Defects

