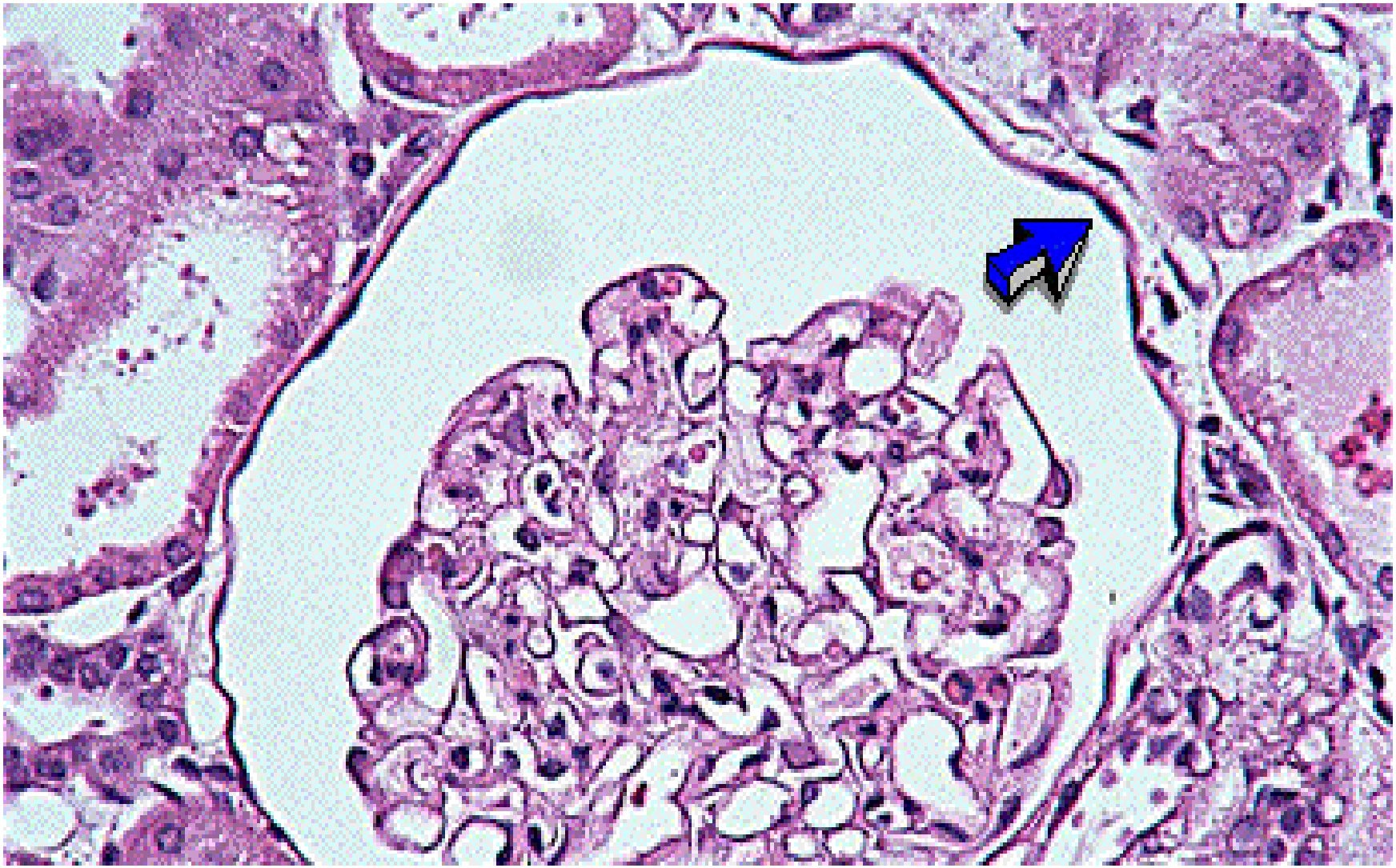
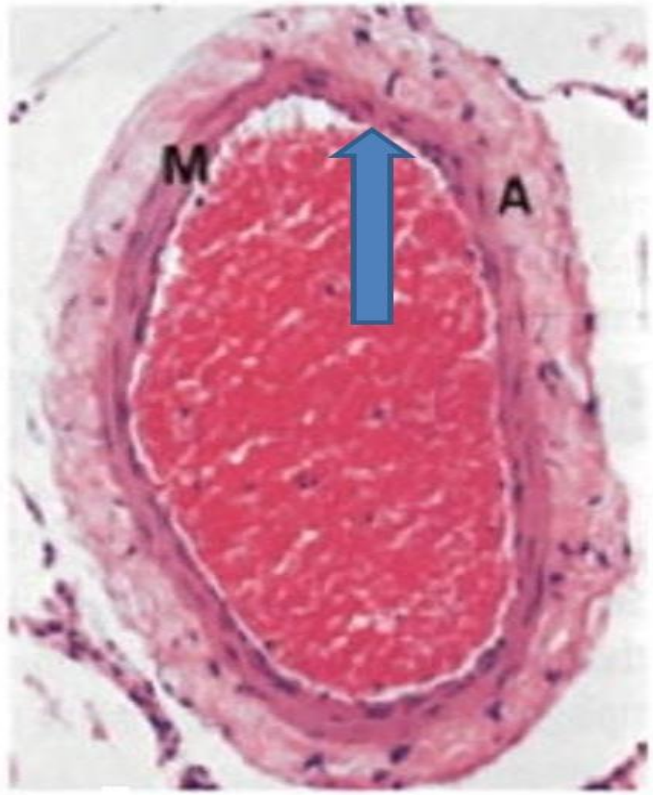
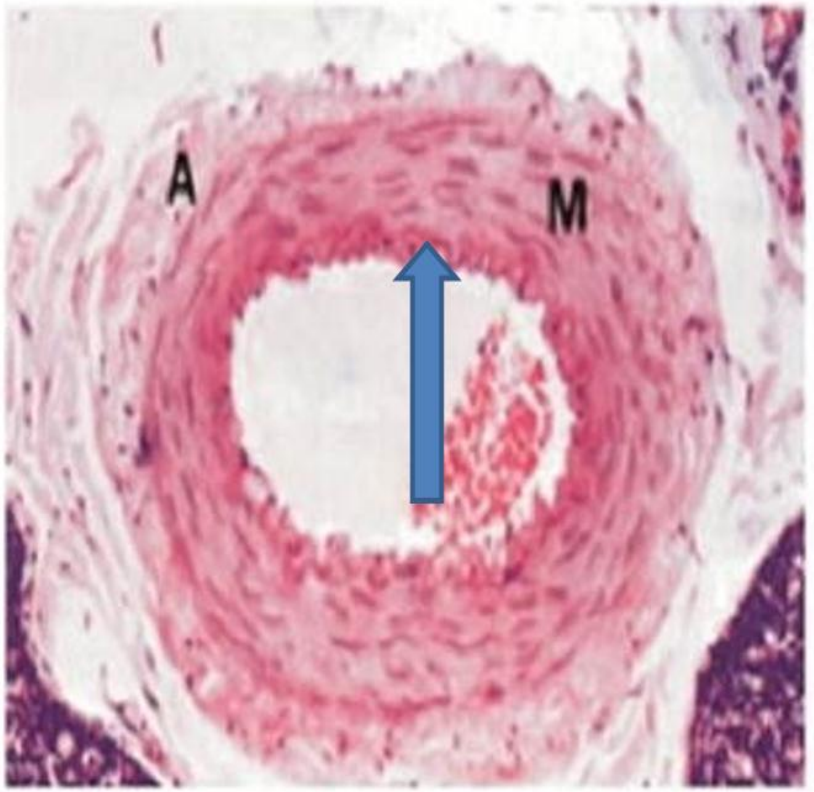
Simple squamous

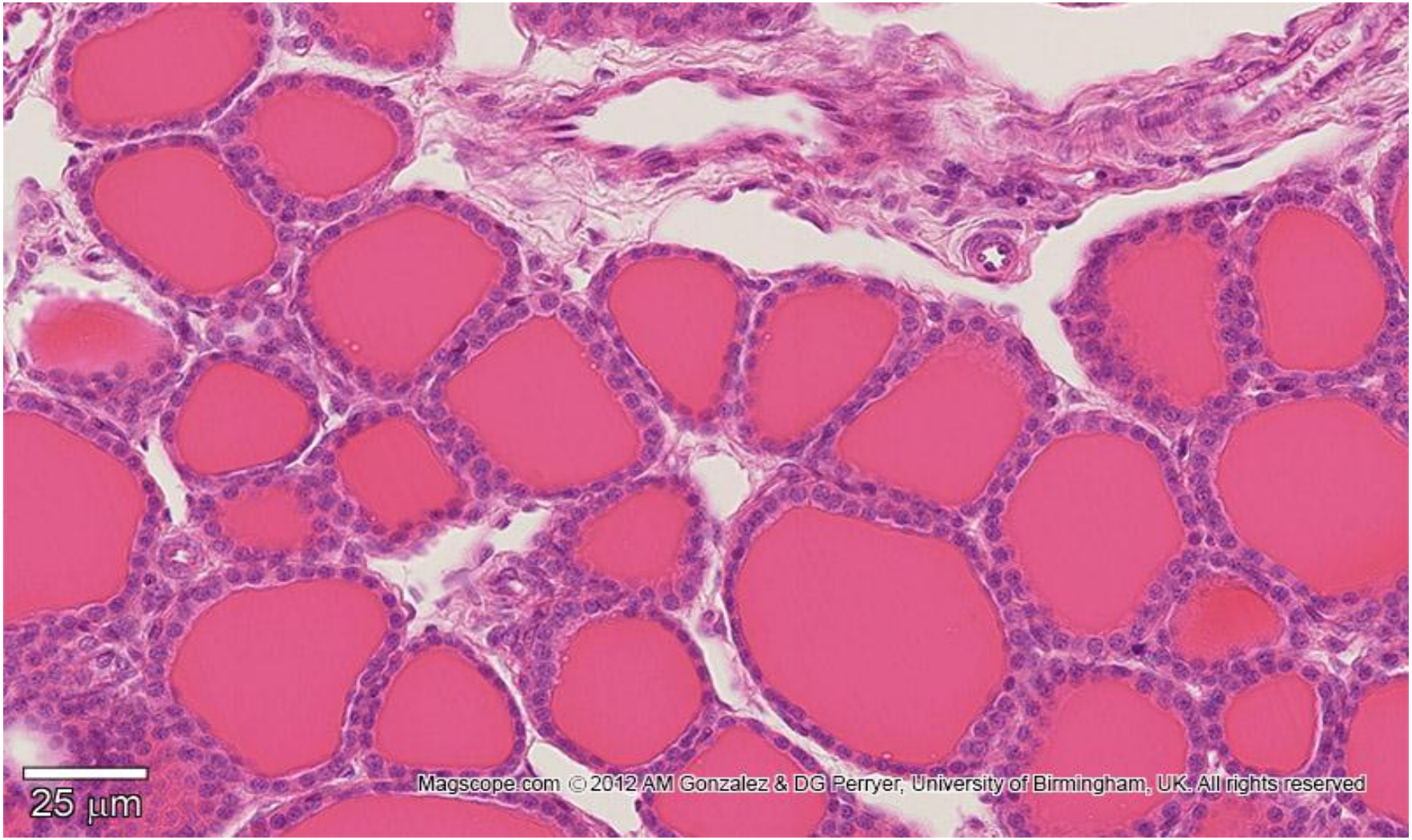


Endothelium

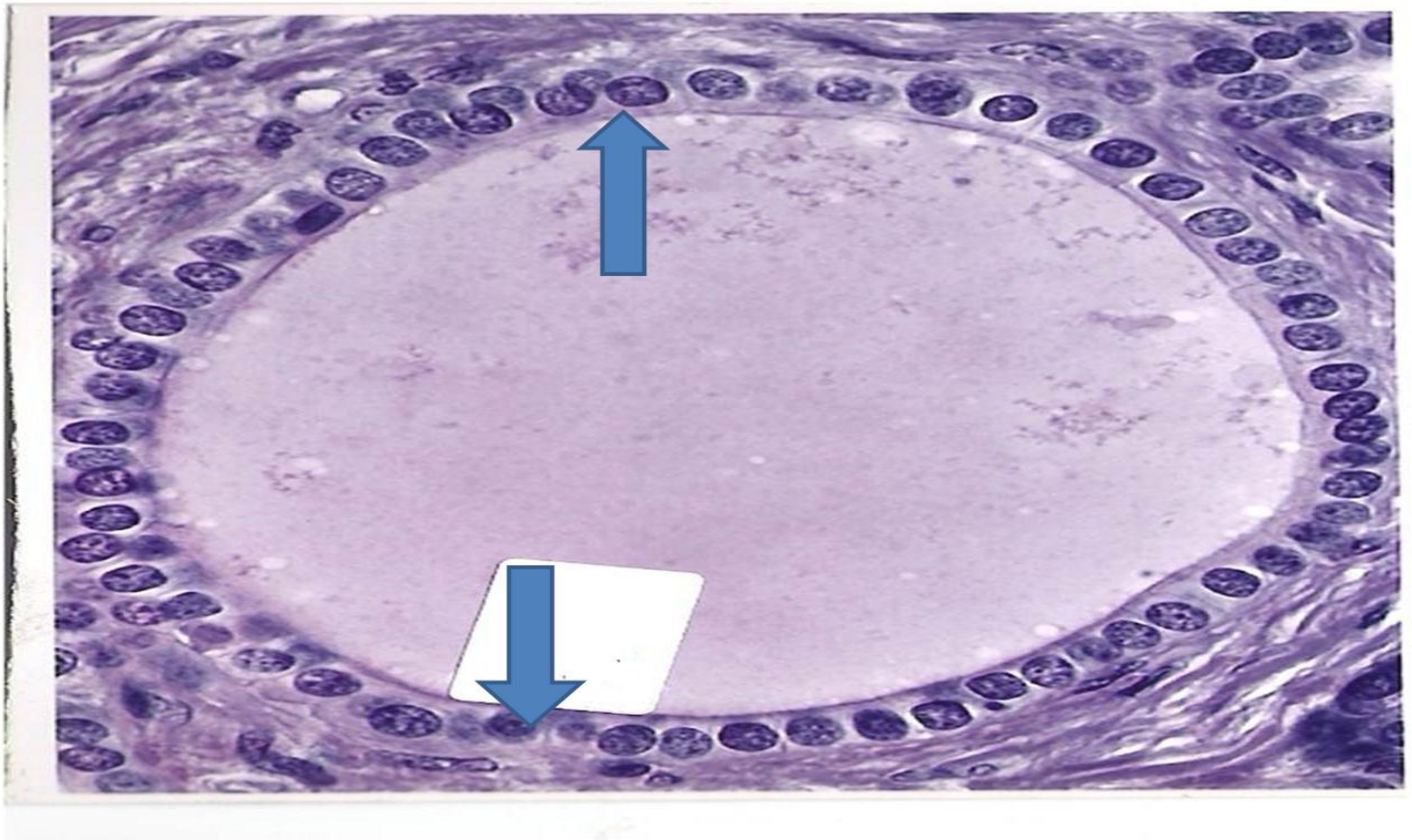




Simple cuboidal



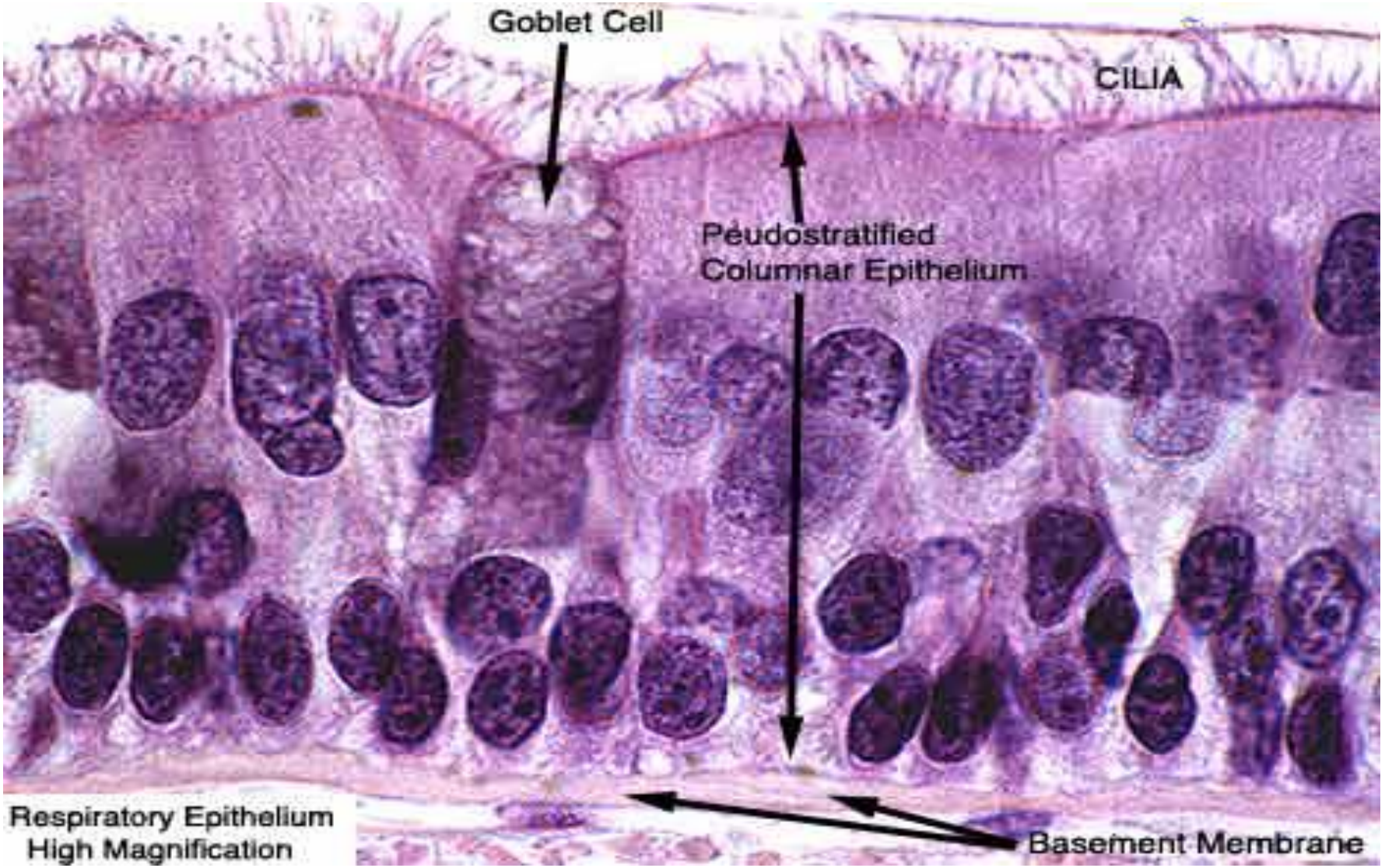
Simple cuboidal



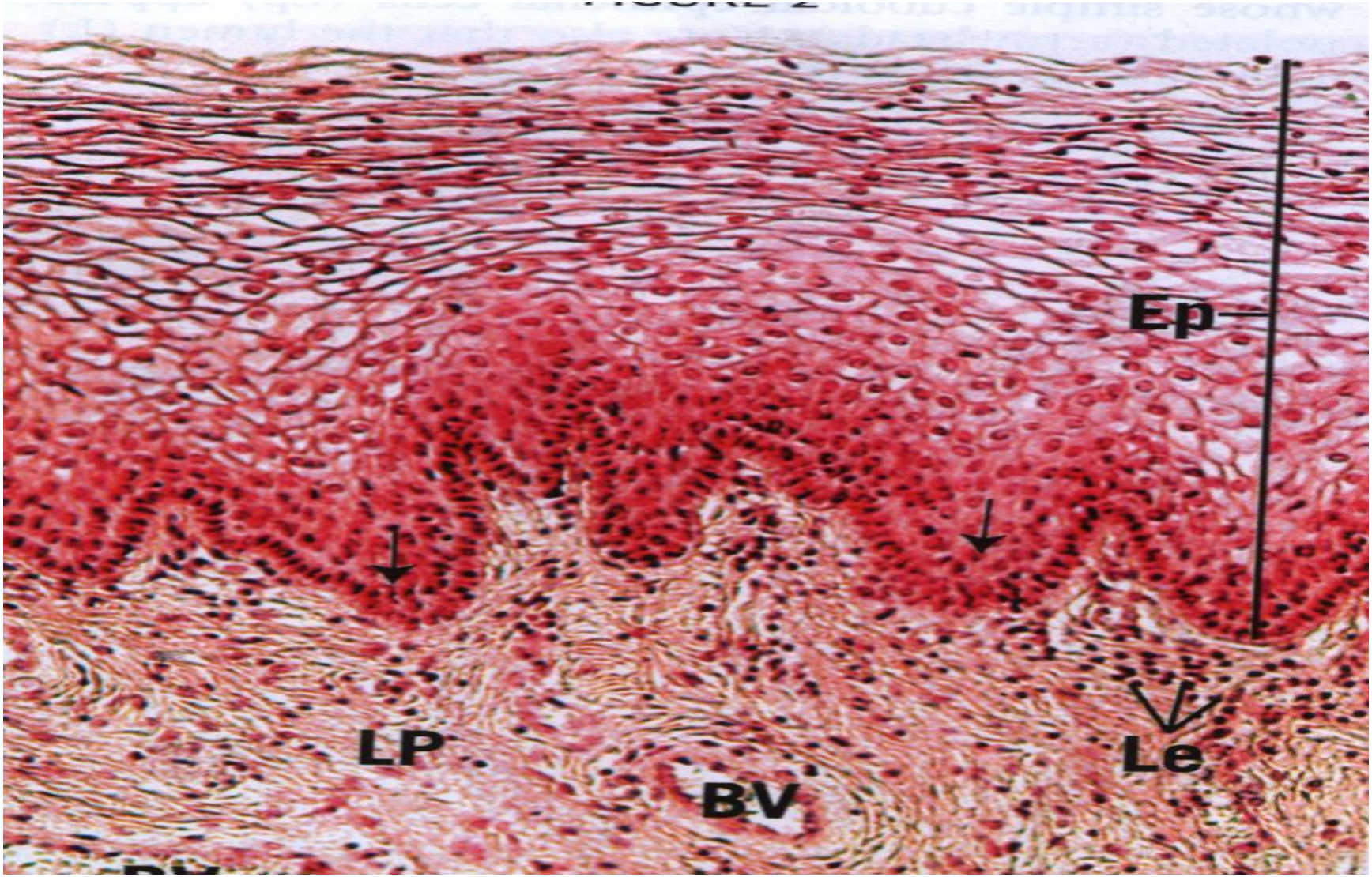
Simple columnar

Pseudostratified columnar ciliated

Pseudostratified columnar ciliated

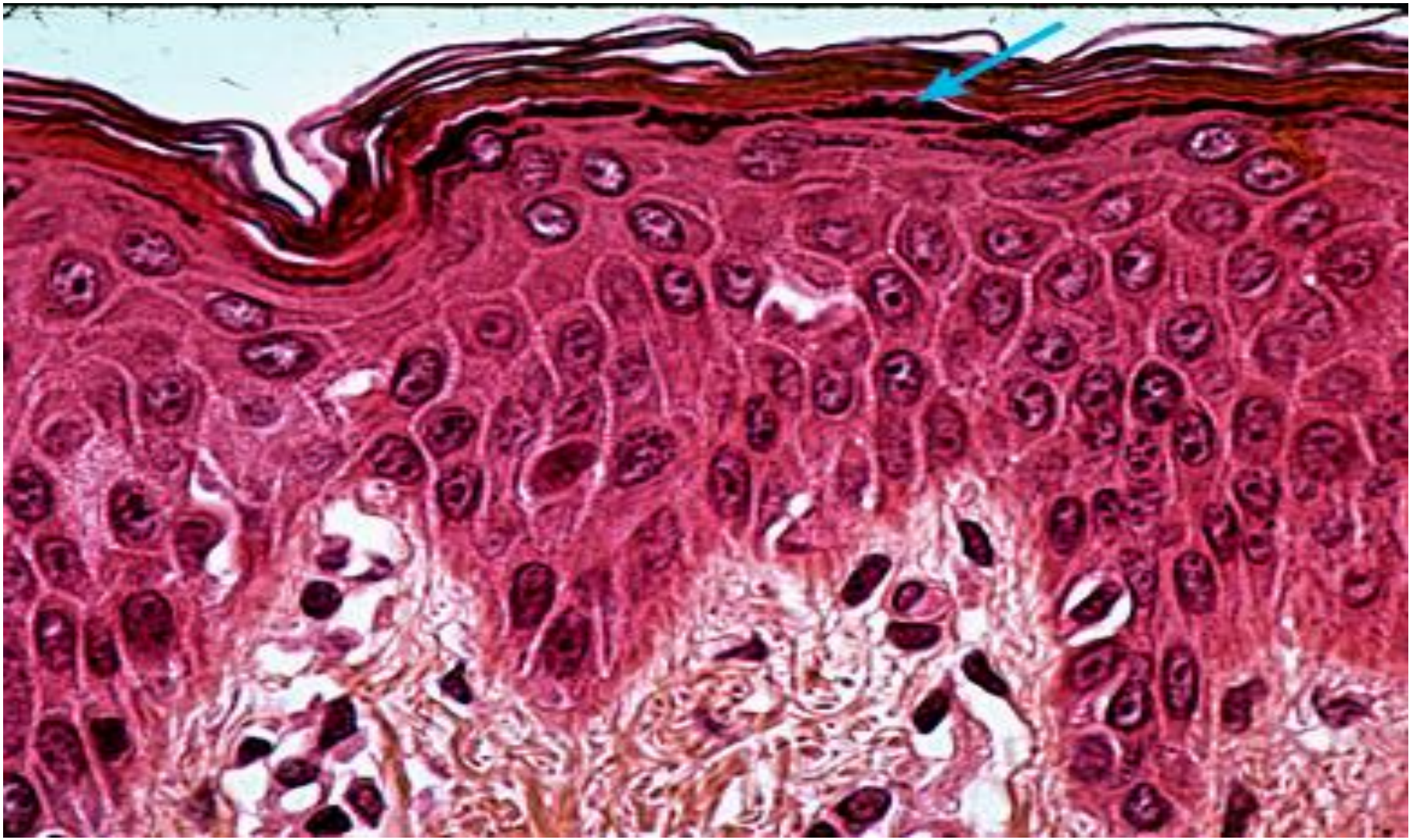


Non keratinized stratified squamous

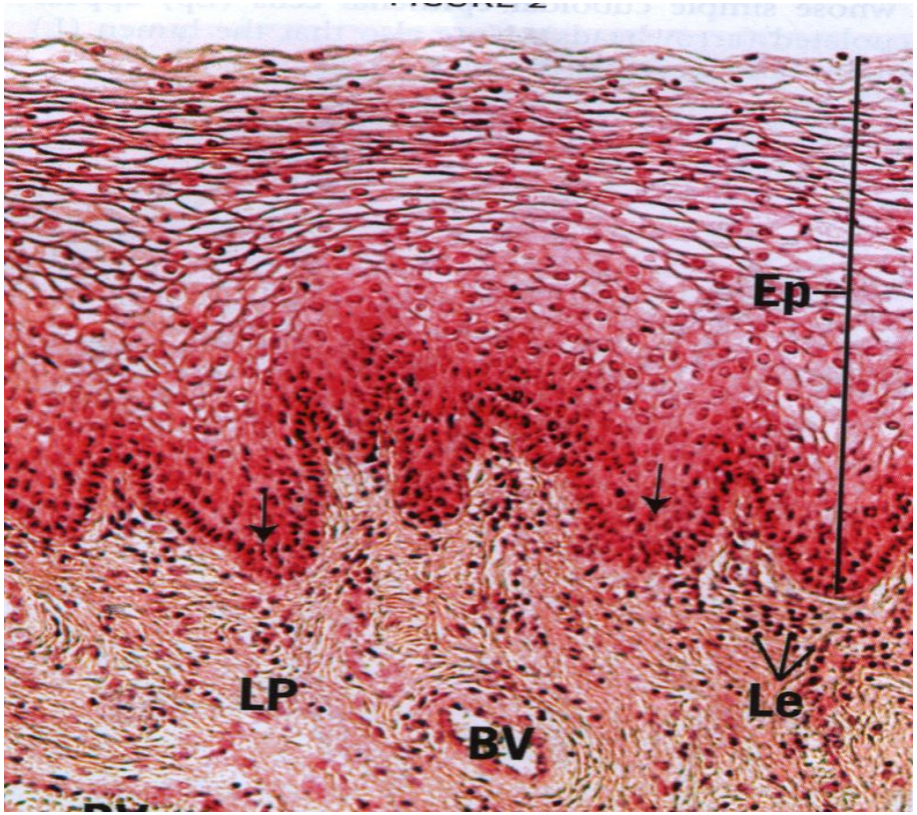


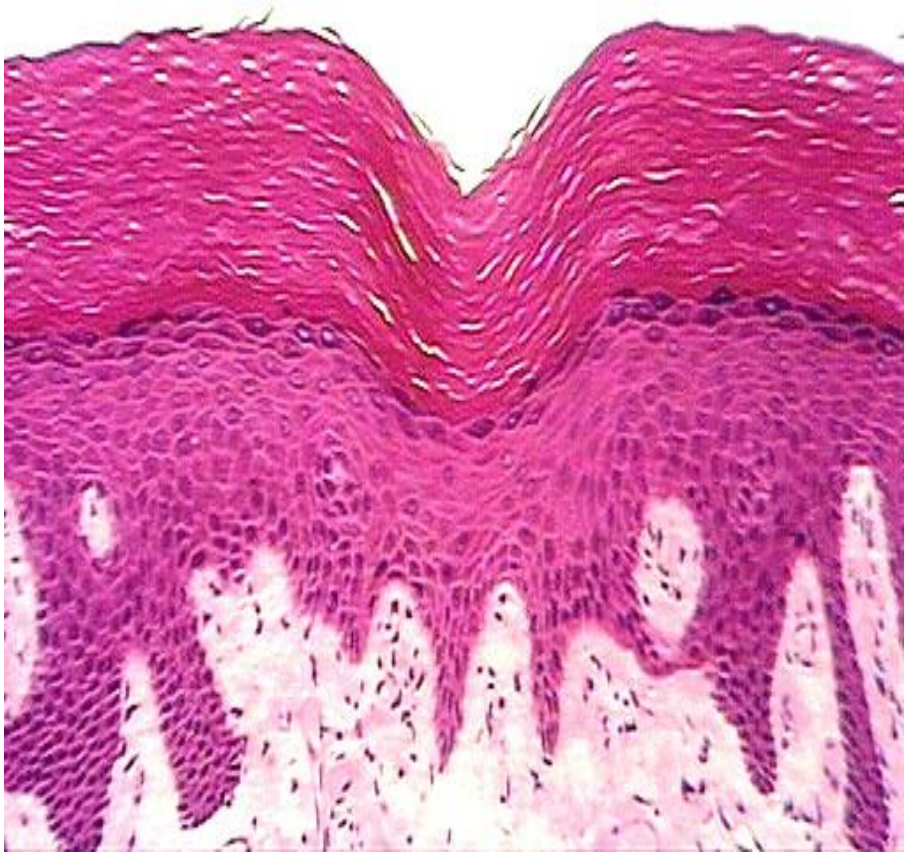
Keratinized stratified squamous

Keratinized stratified squamous

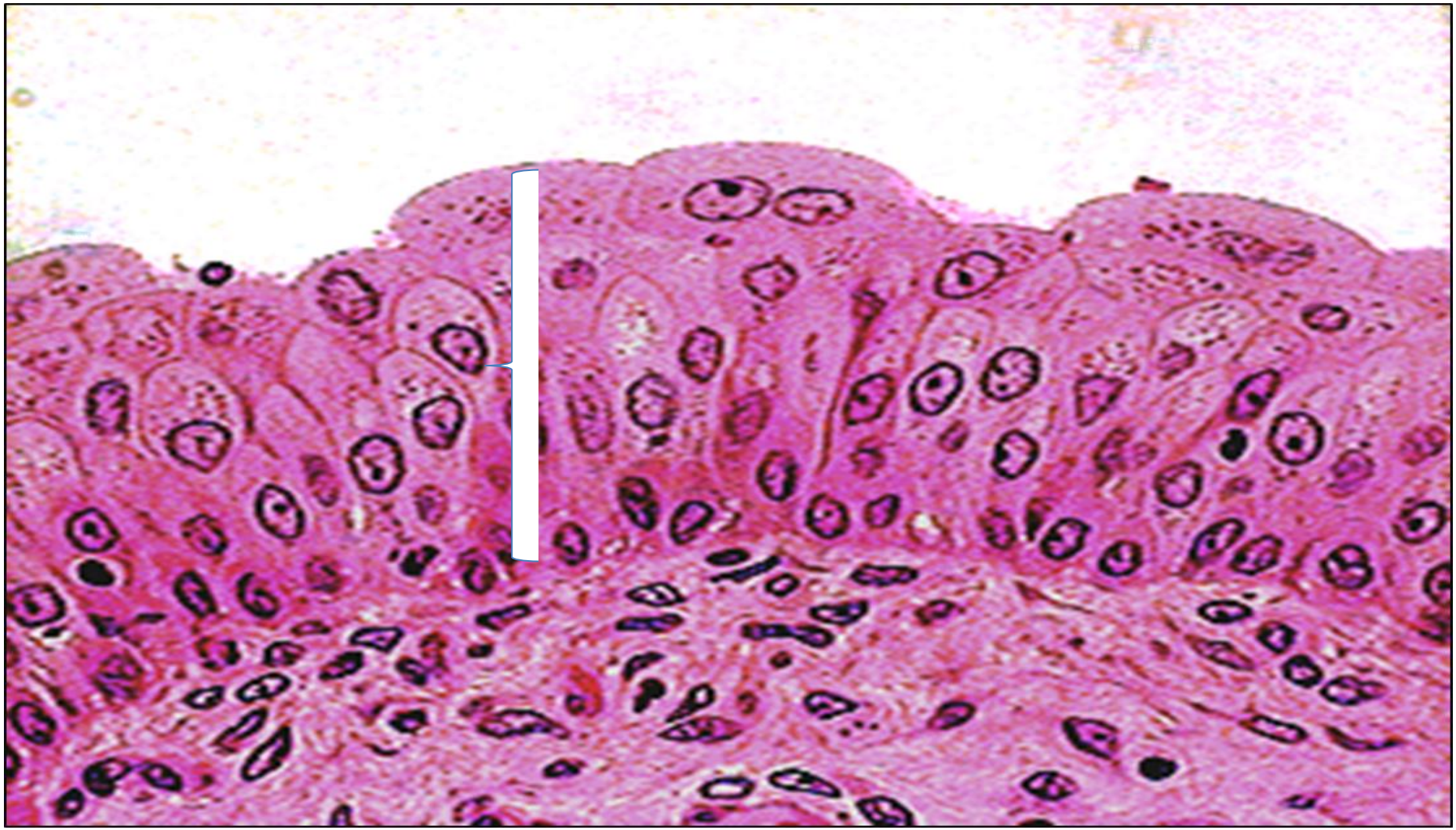


Stratified squamous epithelium

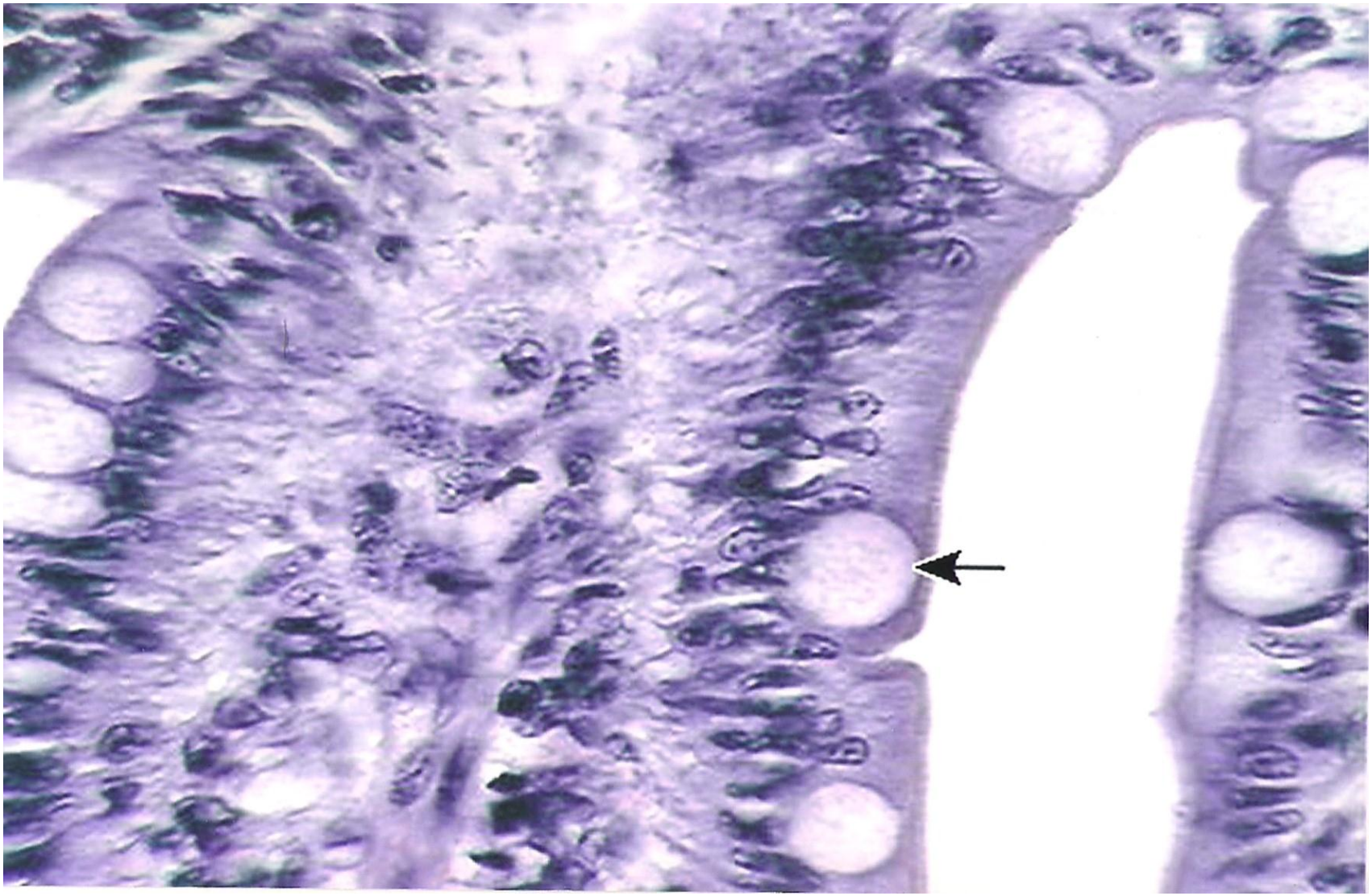




Transitional epithelium



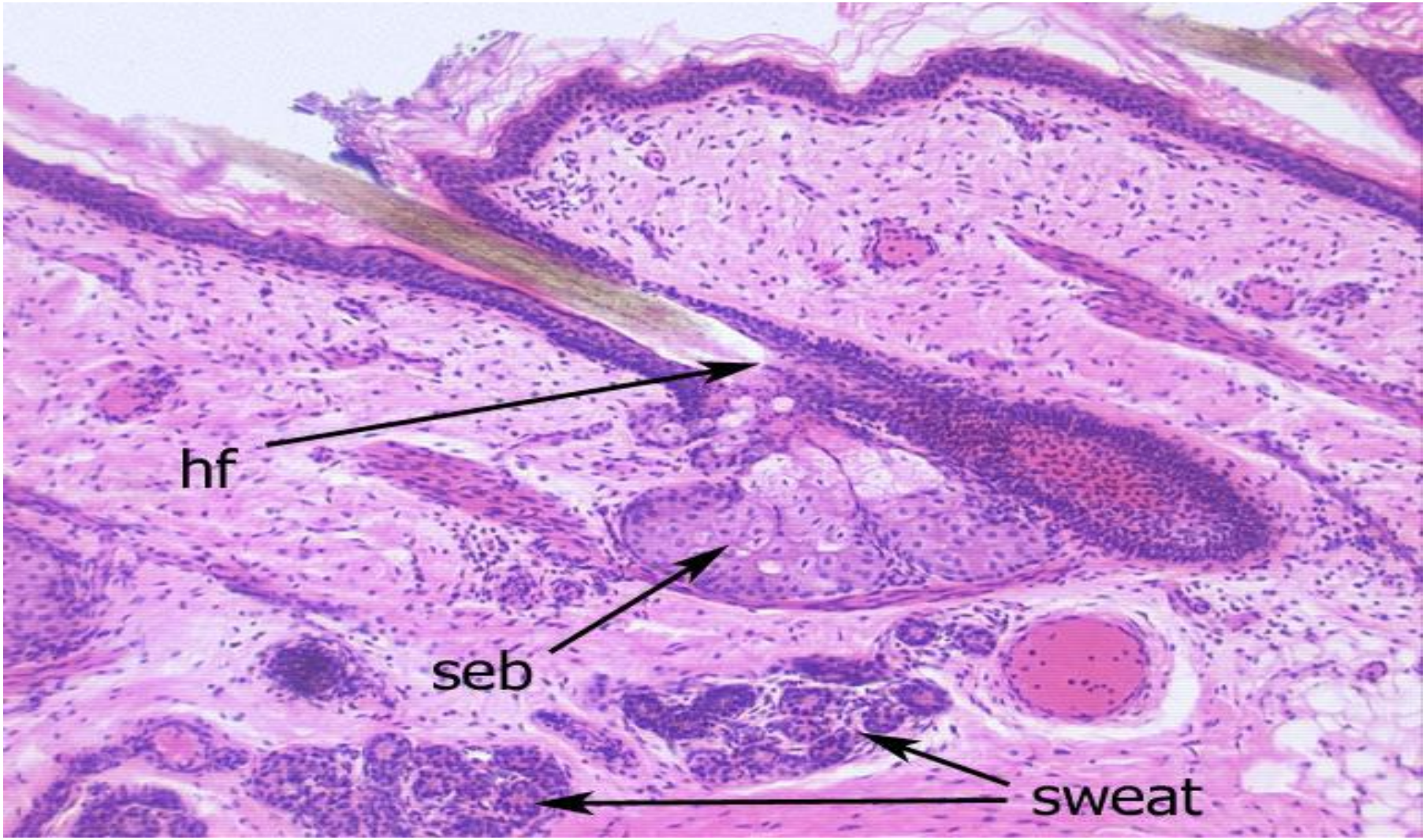
Goblet cell



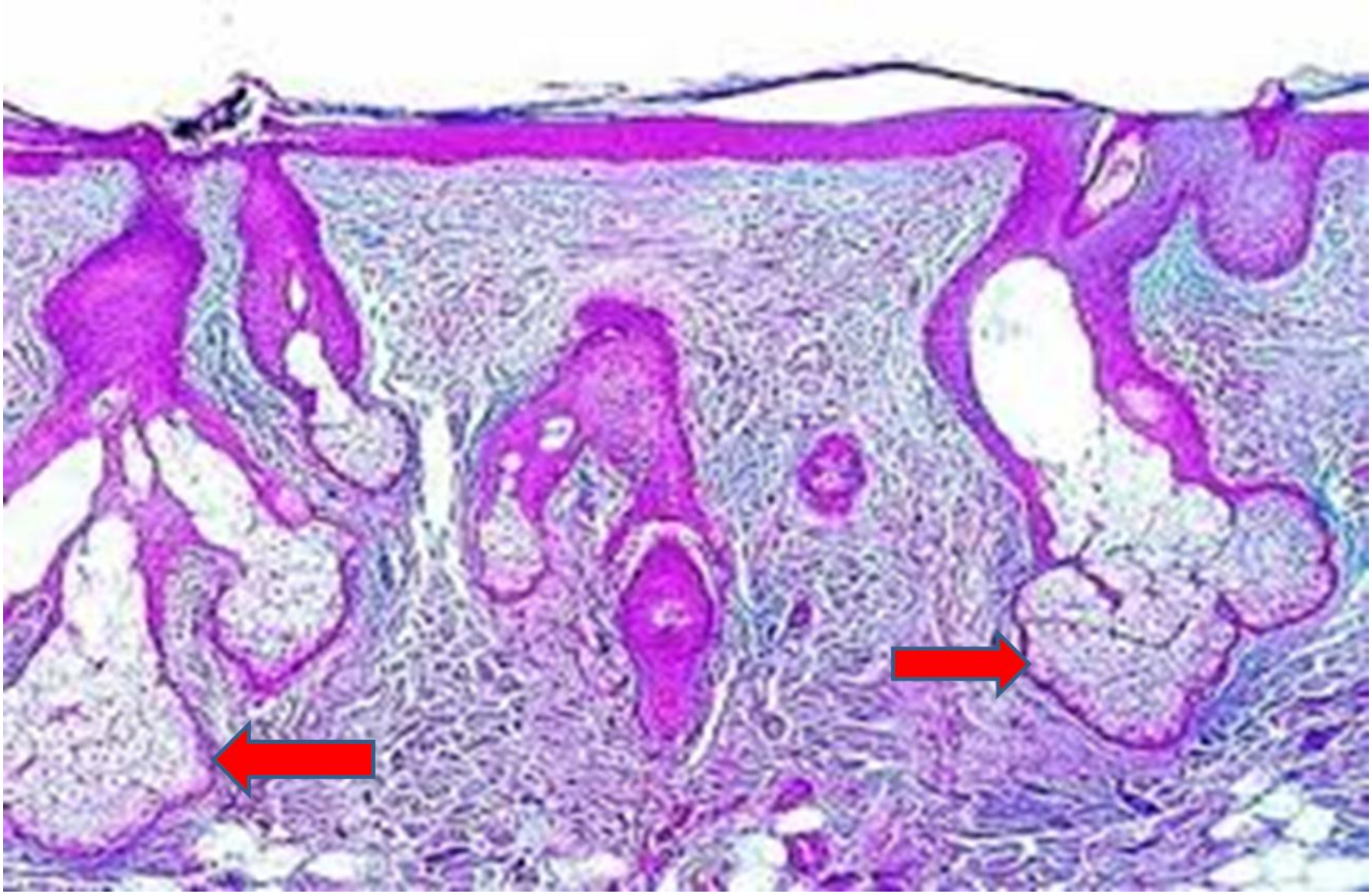
Goblet cell

Tubular gland

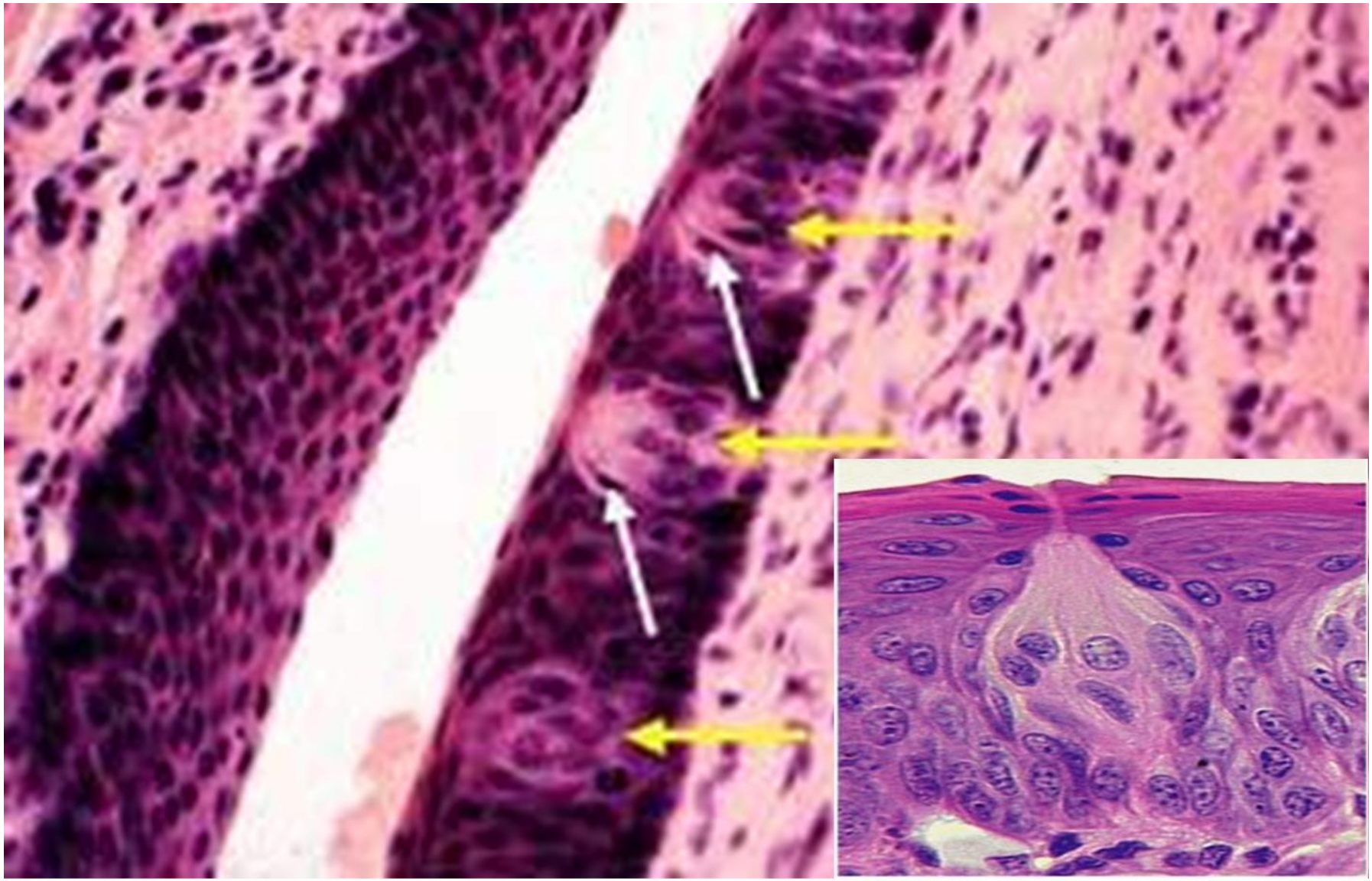
Sebaceous gland



Sebaceous gland

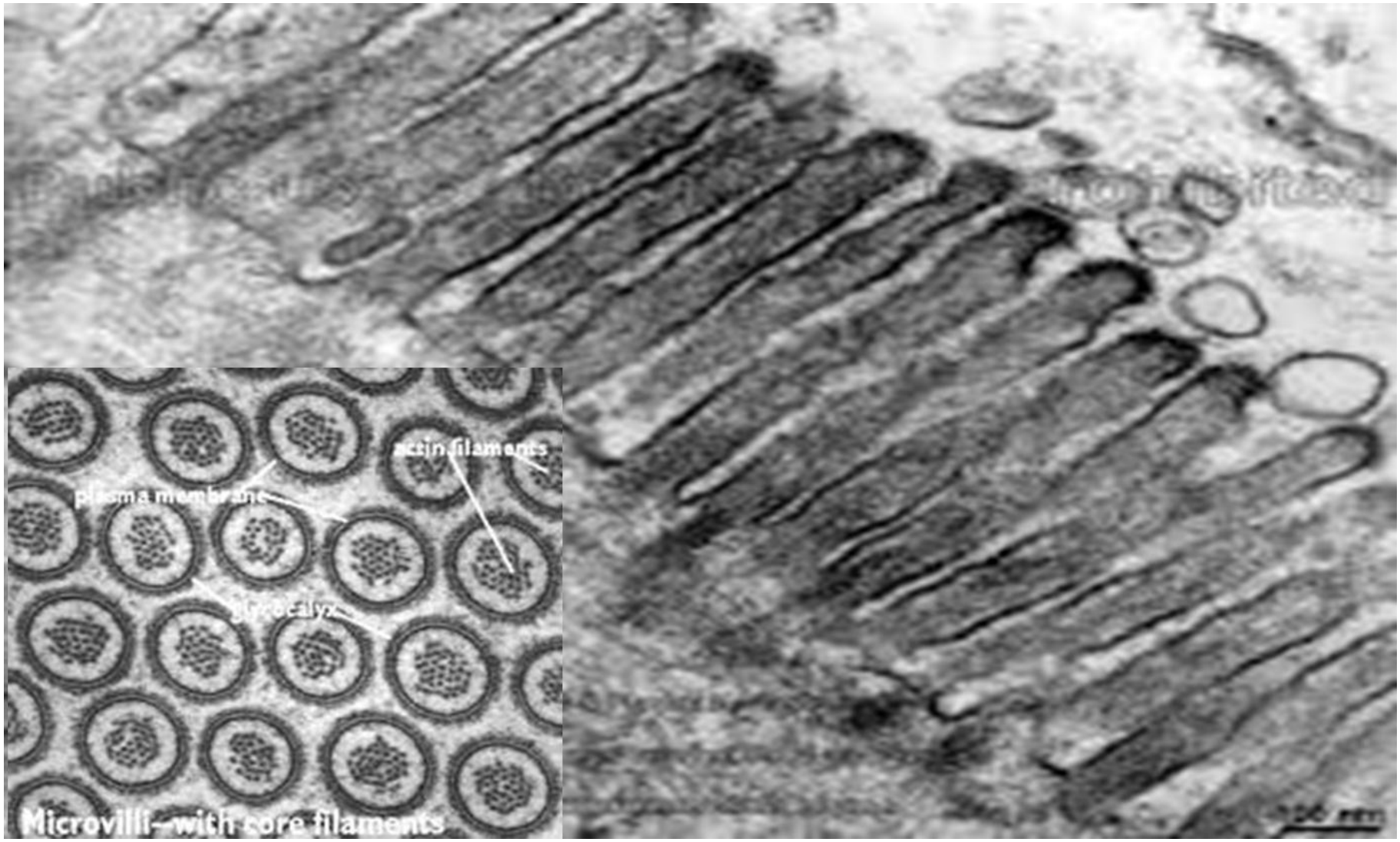


Taste buds

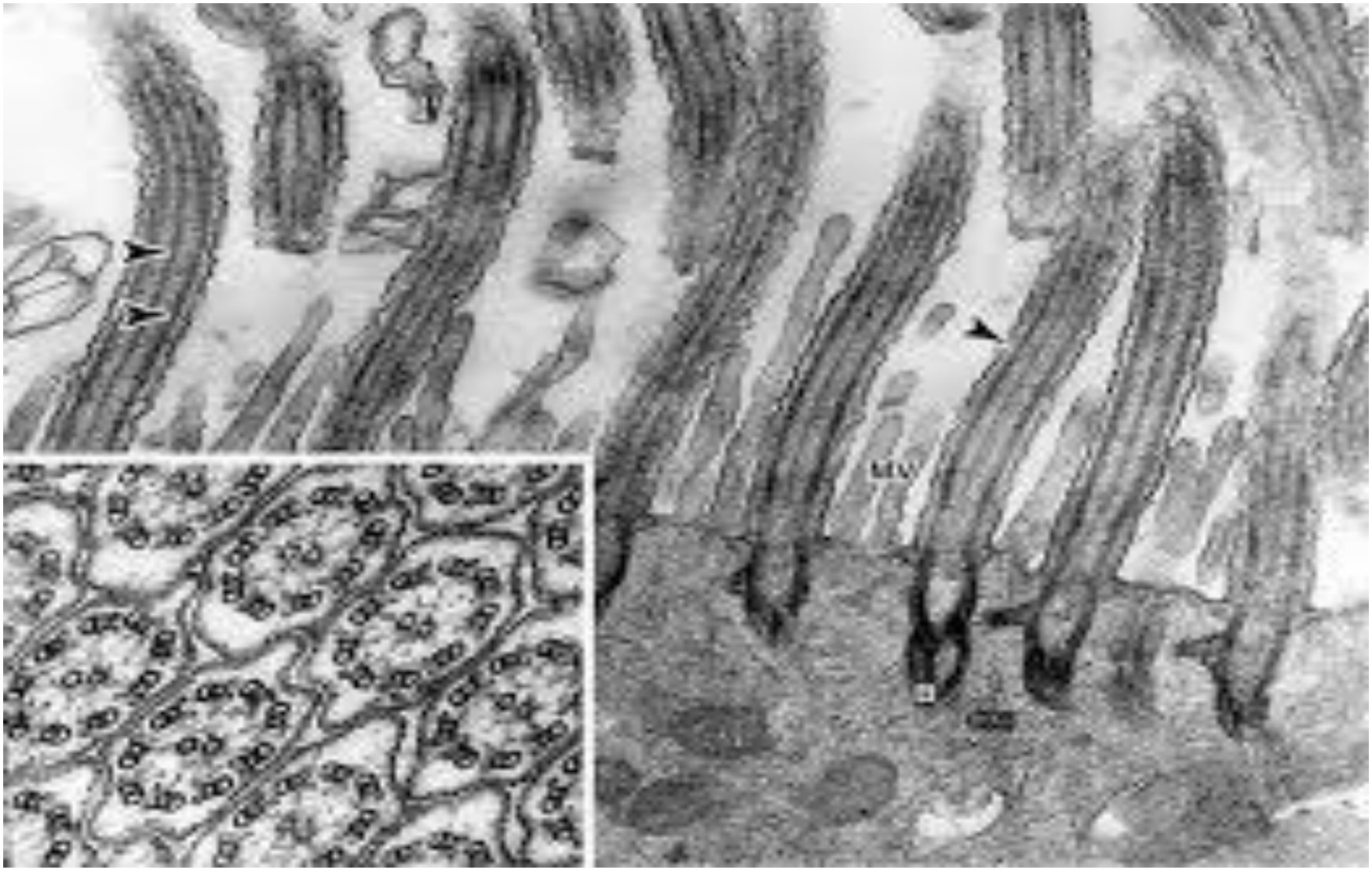


Germinal epithelium

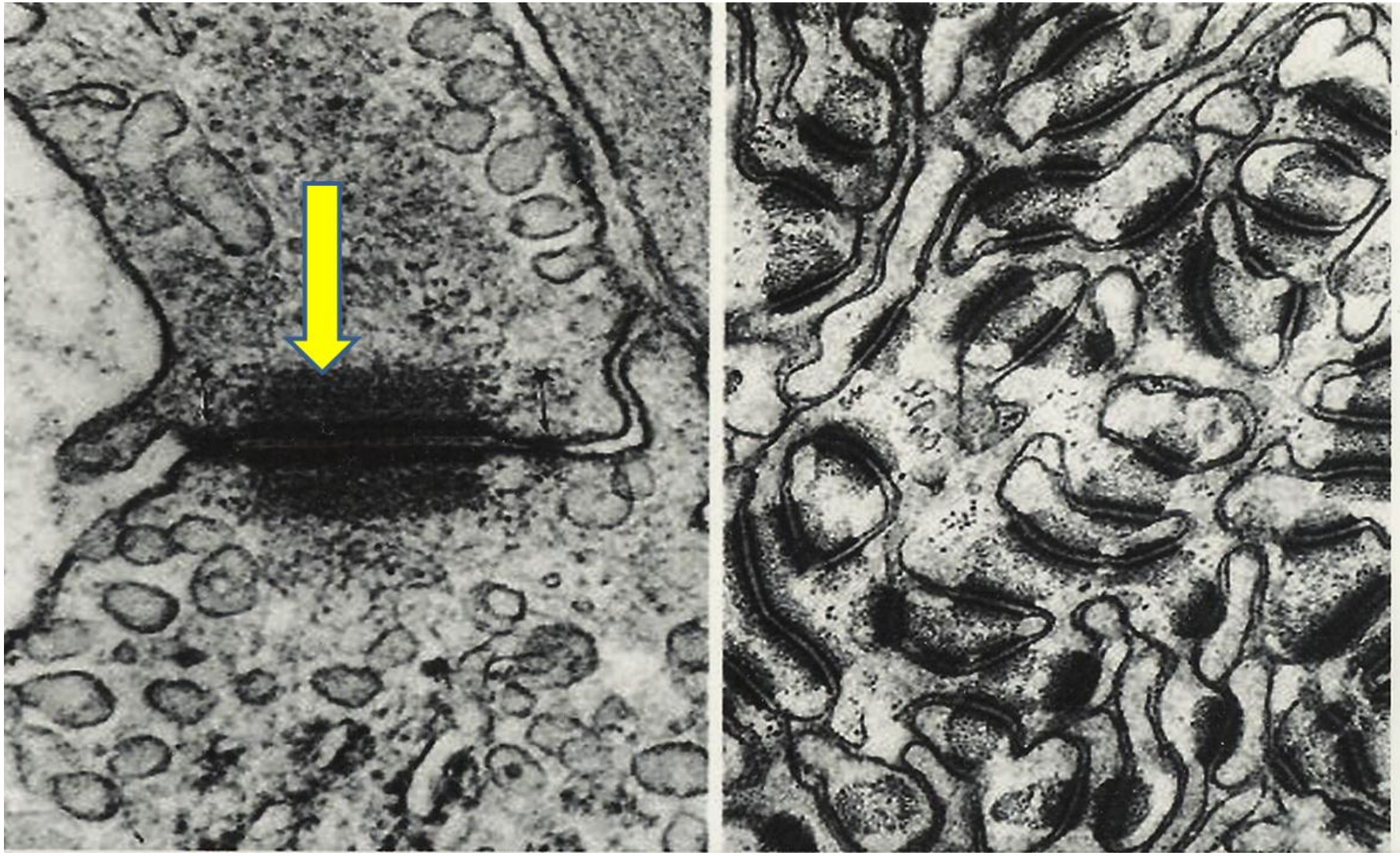
EM of microvilli



EM of cilia

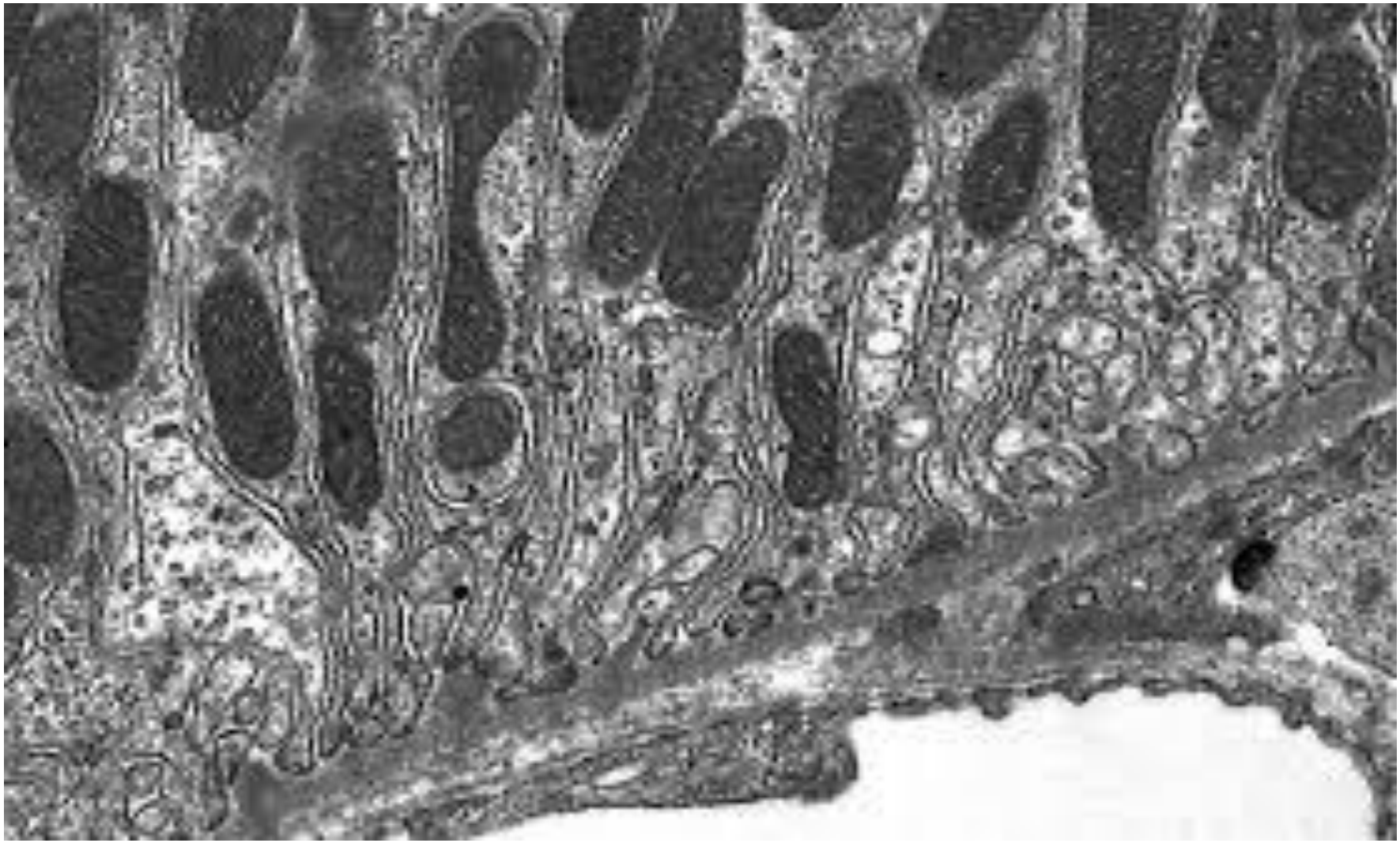


EM of desmosome

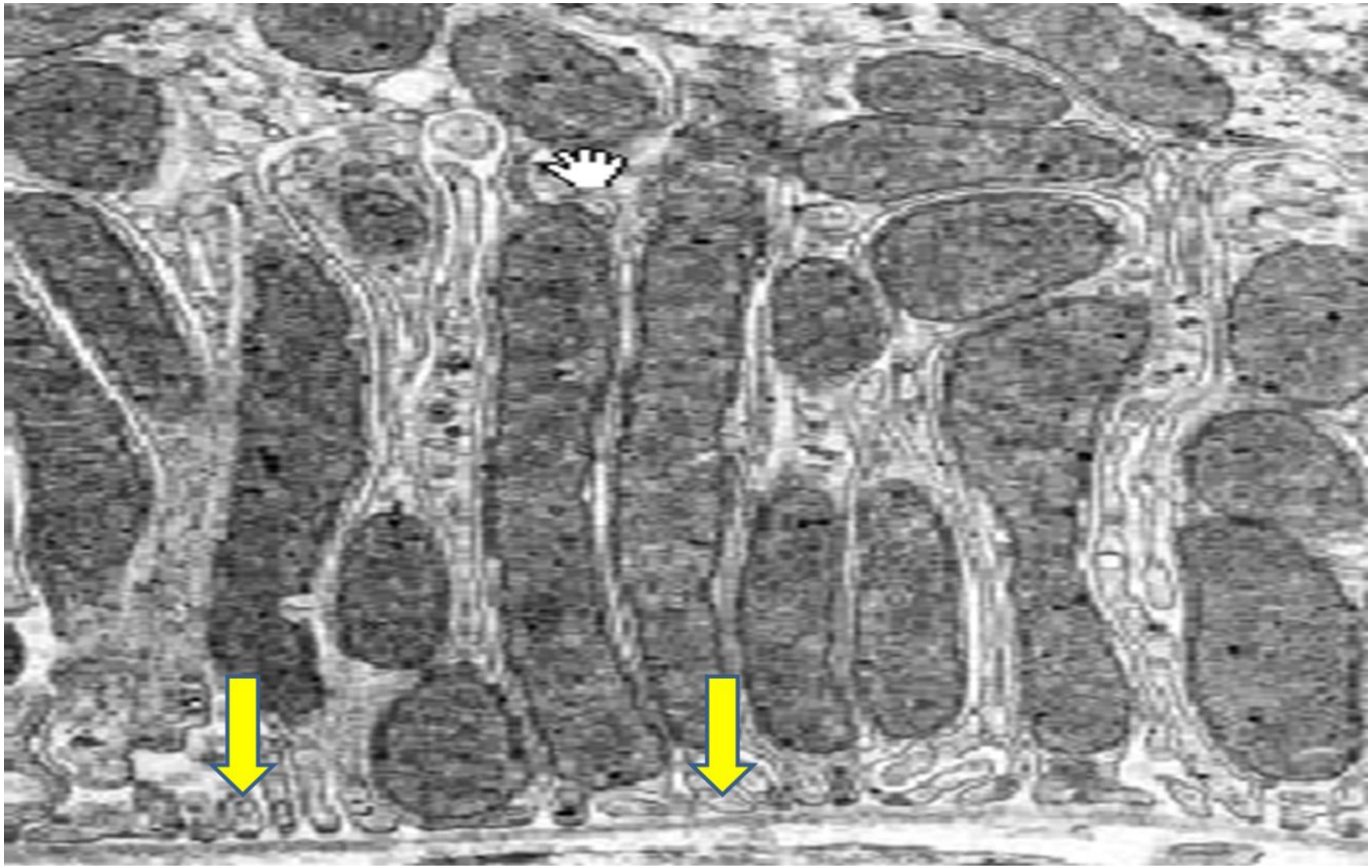


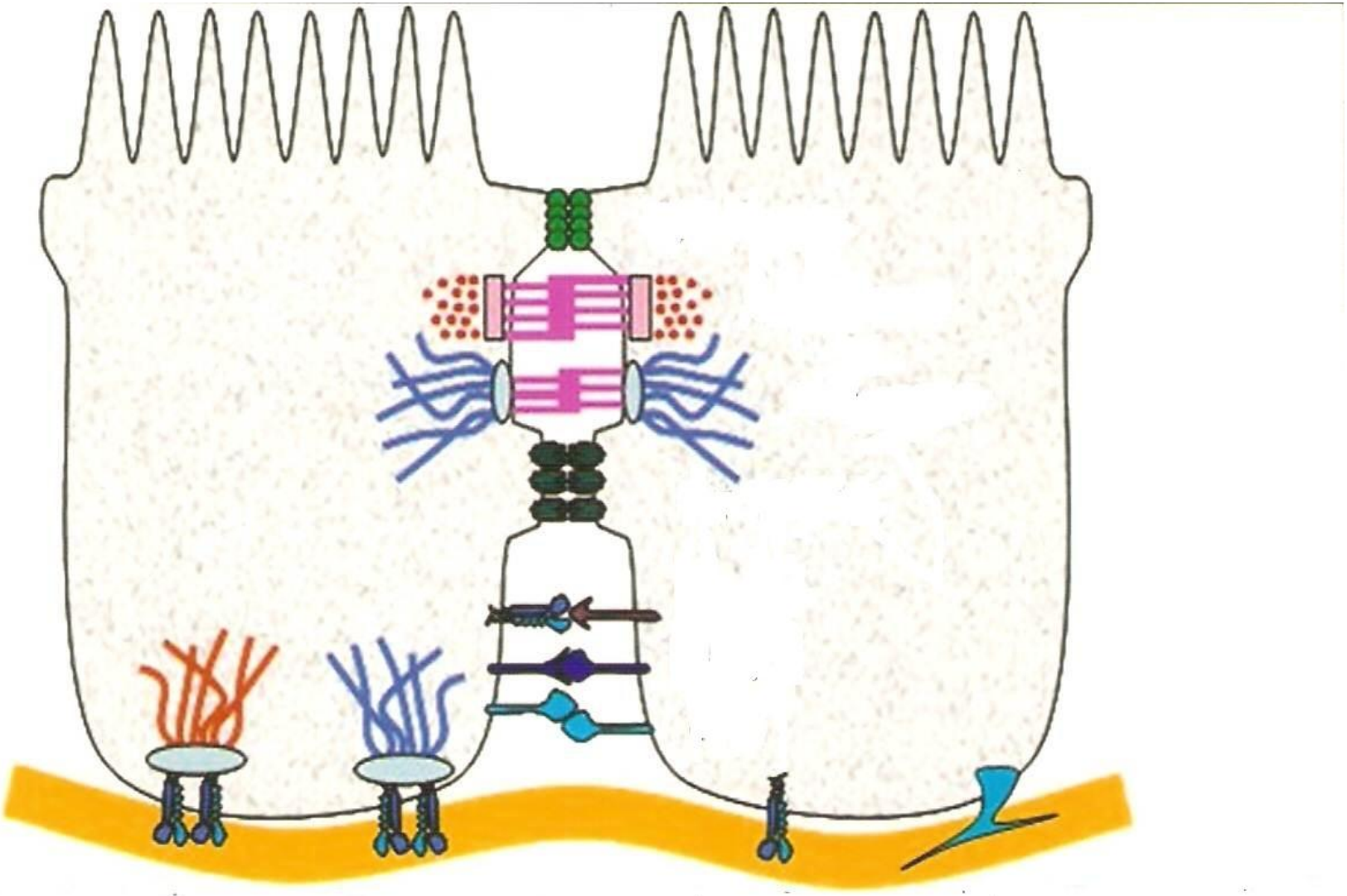
EM of hemidesmosome

EM Basal infolding



EM Basal infolding





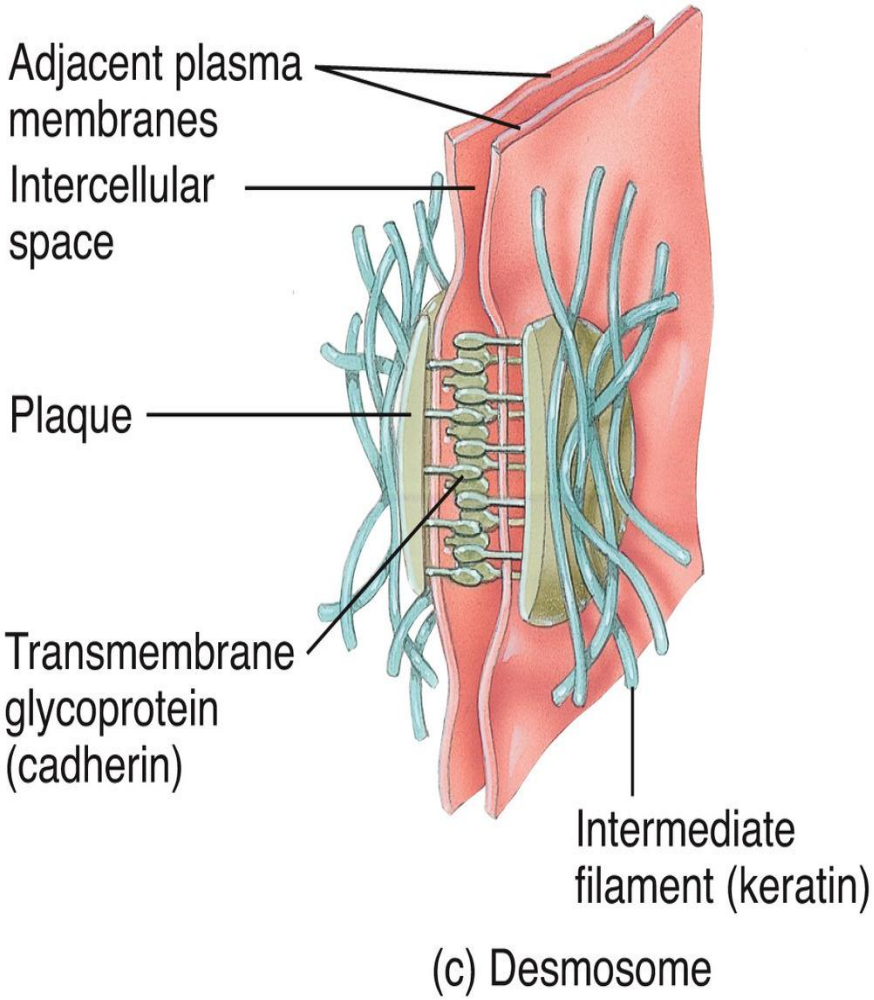
Cell Junctions Types

- **Tight Junctions** (Occluding Junctions)
  - Seal adjacent epithelial cells together
  - Prevent passage of most dissolved molecules, membrane-bound lipids and proteins between apical and basolateral surfaces
- **Gap Junctions** (Communicating Junctions)
  - Allow adjacent cell communication; pass ions & small molecules between cytoplasms
- **Focal Adhesions & Hemidesmosomes**

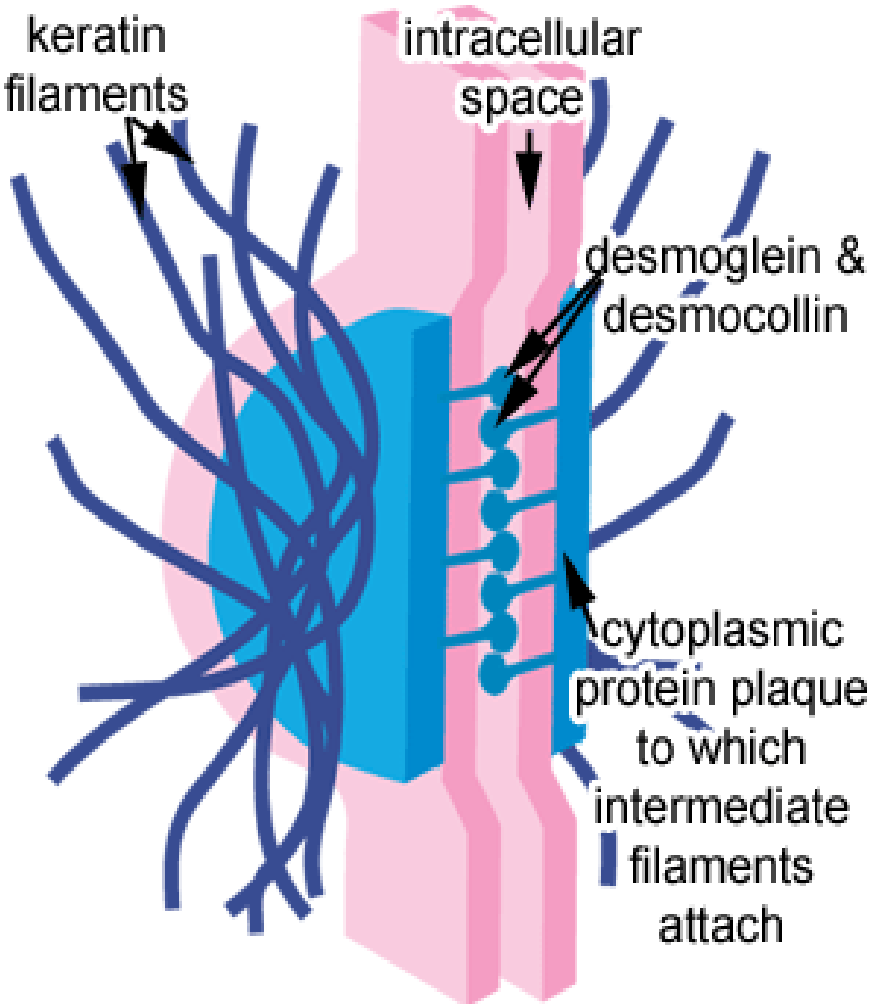
  (Anchoring Junctions, Actin & Intermediate Filament Attachment Sites)
  - Form around integrin-mediated cell–ECM contacts
  - Focal adhesions connect integrins to actin filaments
  - Hemidesmosomes connect integrins to intermediate filaments
- **Adherens Junctions & Desmosomes**

  (Anchoring Junctions, Actin & Intermediate Filament Attachment Sites)
  - Form around cadherin-mediated cell–cell contacts
  - Adherens junctions connect cadherins to actin filaments
  - Desmosomes connect cadherins to intermediate filaments

Desmosome

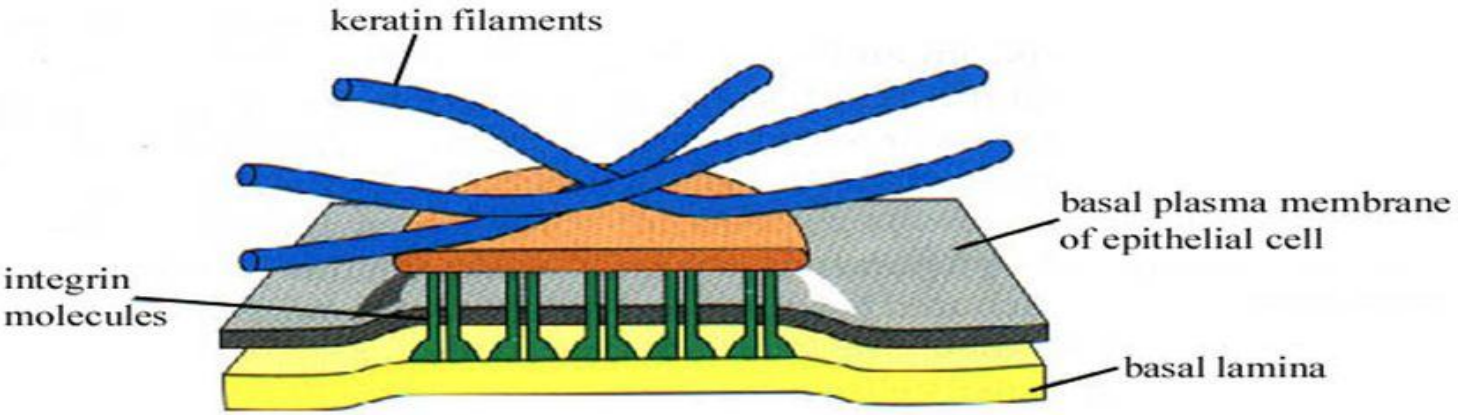


(c) Desmosome



Hemidesmosome

Hemidesmosomes mediate cell-matrix adhesion between epithelial cells and basal lamina



Hemidesmosomes connect epithelial cells to the basal lamina. The integrin ⟨ 6®4 binds to proteins in the plaques and to laminin in the extracellular matrix.