

Practice 10

Glandular epithelium

1. Draw an idealized scheme of merocrine, holocrine and apocrine secretion, and provide examples.
2. Graphically schematize the structure of goblet cells (using electronograms) and their localization in epithelial tissue (covering epithelium of respiratory passages or intestinal mucosa).
3. Provide examples of other single cell glands.
4. Graphically schematize the structure and classification of multicellular glands. Provide an example to each morphological type.
5. What is the principal difference between endocrine and exocrine glands? Provide examples of both types of glands, and graphically schematize their development.
6. Study and draw the principal units of large salivary glands – mucous tubules (gl. submandibularis, gl. sublingualis) and serous acini (gl. parotis, gl. submandibularis, pancreas) when stained by hematoxylin and eosin. Why do the mucous and serous components stain differently?
7. Graphically schematize the structure of serous demilune (crescent of Gianuzzi). In which gland the demilunes are present?
8. What is the difference between „mucus“ and „mucin“?

Recommended study materials: Presentations from practices and lectures, Atlas of Histology (online), Atlas of Cytology and Embryology (online), Junqueira's basic histology.