

Lecture no. 8 – Epithelial tissue

Elaboration of questions is voluntary, and you needn't to hand them in. But they can help you for better understanding and orientation. Use the presentation uploaded into the Study materials folder in the IS, recommended literature or electronic atlases available in the webpages of the Department. You can also use any information resource from the internet, but in that case, please use in the same time your critical thinking. If you have questions to the topic, please use the Discussion groups in the IS.

1. What are the hallmarks of epithelial tissue? Compare them to other tissue types.
2. Emerging of epithelial tissue represented a fundamental evolution innovation, leading to multicellular organism. Why it was so important?
3. Characterize surface of an epithelial cell and provide functional and structural modifications found on individual cell surfaces.
4. Define and classify epithelial tissues according to their morphology and function.
5. What is the basement membrane and what is its structure?
6. Using any information resource determine, what is the „anoikis“, and why it is important for integrity of epithelial tissue.
7. What molecules are found in basal lamina, and which receptors are anchoring cells to these molecules.
8. What are the principal properties of transitional epithelium?
9. What is the difference between primary and secondary sensory epithelium?
10. How do the endocrine and exocrine glands develop? Do they have anything in common?
11. In which organ a striated duct is localized? Put it to the correct place in hierarchy of ducts of exocrine glands.
12. Using any information resource find, why thy cytokeratins are so important for diagnostics.
13. Cells undergoing EMT lose properties of epithelial cells and acquire properties of mesenchymal cells. Which properties these are? Is there any clinically relevant scenario where EMT plays a role,
14. Is EMT involved in embryogenesis? Can you provide an example?
15. What is the difference between hyperplasia and metaplasia? Provide an example of an organ that can be affected by any of them.