

Lung (histology)

náhled|vpravo|Alveolo-kapilární membrána vpravo|náhled|Mikroskopický řez, barvení HE

BT – bronchiolus terminalis

RB – respirační bronchiolus / respiratory bronchiole

AD – ductus alveolaris

A – alveolus

AS – alveolární váček / alveolar sack

IS – interalveolární septum / interalveolar septum

Under the microscope, **the lungs** resemble a mesh. In this case, the individual meshes of the network are formed by **alveoli** . The alveolus is the basic functional unit of the lungs.

On a good section, we can see the final branching of the bronchioles: *Bronchioli respiratorii* → *Ductus alveolares* → *Sacculi alveolares* → *Alveoli*. The epithelium gradually decreases - the original multi-rowed epithelium with cilia gradually becomes a single-layer cubic epithelium (bronchiole) and squamous epithelium (alveoli).

During observation, we naturally come across small vessels (max. with one to two erythrocytes in the lumen of the vessel). The cells of the epithelium of the alveoli include:

- Type I pneumocytes (small – flat – alveolar cells; organelles are gathered around the nucleus),
- Pneumocytes II. type (large – cubic – alveolar cells; microvilli; producesurfactant),
- Makrophages.
- Lymphocytes.

Alveolar septum: Capillaries, macrophages, elastic and collagen fibers, and fibroblasts are found between the two layers of type I pneumocytes.

Blood – air (alveolo – capillary) barrier:

- Type I pneumocytes..
- Basement membrane..
- Endothelial cells of capillaries.

Links

Related articles

- Lungs
- Fetal lungs (histology)

References

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