

## Comparative histological morphology of fishes spleen.

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Established the age-related changes in functional activity of the spleen of Terek trout and rainbow trout, is holding in concrete canals with artesian water.

Bony fishes spleen is a multifunctional organ: hematopoietic, acting as the depot of blood, place of the collapse of red blood cells and produces lymphocytes.

Due to the lack of bone marrow and lymph nodes, its main function is hematopoietic. Fishes spleen provides forming the erythroid cells. Therefore, it functionally resembles the red bone marrow of higher vertebrates. Spleen of this species of fish has ribbon-like shape and dark cherry color, which parenchyma is formed with white and red pulp. There is a clear distinction between them. The white pulp consists of the lymphocytes, the red pulp is full of erythrocytes, platelets, lymphocytes, macrophages and plasma cells. The spleen's surface is covered with a thin-walled capsule, from which is retreating deeply short trabeculae with arteries and veins consisting of reticular and fibrous connective tissue. Circulation occurs with open type. Spleen's arterioles terminate freely, blood coming out into intercellular gap, and then gathered in venules and veins.

Terek trout and rainbow trout have in the trabeculae full-blooded arteries and veins. On the entire surface of slices were found pigment cells.

Two year-olds Terek trout increases the absolute weight, compared with rainbow trout at 0,016, or 5.9%, and the relative decreases by 0.05 or 25%; in the spleen, compared with fingerlings, increases the amount of lymphoid tissue, which is an indicator of increasing of lymphopoietic function. In hemocapillars were found all the corpuscles.

Rainbow trout has larger follicles in white pulp, in which defined eccentrically located central arteries, in trabecular vessels is small amount of blood.

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