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VARIANTS OF BRANCHES OF ORBITAL NERVE

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Introduction. Knowledge of orbital nerves branching helps to figure out the pathology of nerves of the eye socket correctly, to assess the damage in personal injury, and understand irradiation pain.

Aim. Studying the variations of beginning, progress, branching and connections of the nerves of the orbit with the surrounding tissue is of practical importance.

Materials and methods. Variations of nerve branches explored at 18 dead bodies of babies, children, and adults. Research methodology: dissection, photographing and sketching.

Results. Orbital nerve divides into its main branches: frontal, lacrimal, nasal-ciliary nerves and mainly before the entry into the eye socket in the anterior-lateral wall of the cavernous sinus. The nerve either gives the three branches, or the nasal- ciliary nerve starts at the lower medial surface and then it is divided into frontal and lacrimal nerves. Discharge of nasal-ciliary nerve may be very high and be located close to the cell site area of the trigeminal node. Frontal nerve within the orbit varies in quantity and level off the branches, their connections and their location. The supratrochlear nerve can begin at the front (50 percent), medium (34%) or posterior (8.5%) thirds of the orbit a branch or two branches at different levels (7.5%) of the orbit may be separately (4.5%) or merged into one branch (3%). In 24.5% cases the supratrochlear nerve starts from the medial branch nerve in anterior third of the orbit. They are connecting twigs between the supratrochlear and the subtrochlear nerves in anterior segment of the eye socket.

Supraorbital nerve is divided at its medial and lateral branches into: 67% of cases-in the front third of the eye socket, in 17.5% cases on the border of the anterior and middle thirds of the eye socket, in 14.5% cases in the middle third and 1 per cent on the border between central and posterior third length of the orbit. In the one case, lacrimal nerve leaves from the frontal nerve at the right side, in another case on the left within the middle third-additional lacrimal nerve. The lacrimal nerve extends from beginning to the lacrimal gland as a single branch, sometimes two (3%). Lacrimal nerve may be connected with branches from nasal-singles nerve in the back third of the orbit. Nasal-ciliary nerve enters into the eye socket through the upper part of the lateral tendinous ring. The connecting branch with singles node starts from nasal-ciliary nerve principally in the area of common tendinous ring (90%), and less commonly behind (4) or ahead of it (6%).

Conclusions. So, there were direct contacts between the nasal-singles nerve and supratrochlear (1%), between nasal-singles and plaintive nerves (1%).