S4-1.1

Deep Learning in Processing Medical Images and Calculating the Orbit Volume

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A software tool for calculating the volume of a soft-tissue eye orbit using the deep learning of neural network Mask R-CNN has been developed and tested. The result of the development will be in demand when evaluating the results of surgical intervention for the reconstruction of the thin bones of the orbit. It was established that the inaccuracy in constructing the contour of a soft-tissue orbit is 4–8%.