

DIAGNOSIS OF ORBITAL TUMORS BY ULTRASOUND /A-SCAN/

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The main point in modern diagnosis of orbital tumors is to achieve the detailed data about the tumors morphological nature. Ultrasonography of the orbit in A-scan is the method, which allows to get some informations about it. Neoplastic tissue is characterized by the ultrasound through transmission pattern, which is different than this one in health orbital tissue. This report is the analysis of tumoral echograms of the orbit in 40 cases of orbital tumors, treated or consulted in Eye Clinic of Poznań Medical Academy. Investigations were performed by using the Ultrasonic Ophthalmoscope CU-1 /producer IPPT PAN Warszawa/. We've used the transducer GO3 with frequency 6 MHz and 5 mm diameter of the probe in 7 and 9 position of amplification and first position of impuls diameter. Apparatus had sensitiveness 43 mm and 48 mm in relation to Buschmann's parafin standard. Our conclusions are, that tumoral echogram of orbita isn't the echogram of stable pattern. There is a certain degree of corelation between the picture of tumoral echogram and a type of morphological structure of tumors. We can outlined in our material several types of echograms: echogram of cyst, of carcinoma, haemangioma, sarcoma, pseudotumor. Possibility of reflect morphological structure of tissue based on wavy character of ultrasound. High frequency of wave emitted by transducer makes, that it length is comparable with elements of submacroscopic structure of orbital tissue. We want also to stress, that A-mode presentation is in these types of investigations method of choice.