

COLOR DOPPLER IMAGING (CDI) OF RETROBULBAR VESSELS FINDINGS IN GIANT CELL ARTERITIS WITH EYE INVOLVEMENT

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Background: Giant cell arteritis (temporal arteritis) is a primary vasculitis, that affects large and medium arteries, especially branches of the external carotid artery (ECA).

Purpose: To assess the role of CDI of retrobulbar vessels in the study of four patients with giant cell arteritis with eye involvement.

Methods: We have used a sonographer with 8-15 MHz linear probe.

Results.All patients presented malaise, temporal headache, tender temporal arteries and signs of inflammation. The first patient had a central retinal artery obstruction of the right eye, and the others had an ischaemic optic neuropathy of the left eye. Temporal artery histology was positive in all cases. Ultrasound investigation was performed within the first 10 days of corticosteroid treatment. CDI of retrobulbar vessels detected low blood velocities, especially end-diastolic velocities and high resistance index in all retrobulbar vessels, in both orbits, for all patients. Typical sonographic features in temporal arteritis were „halo”, associated with stenoses or occlusions of branches of ECA.

Conclusions: Ultrasound technique is a valuable diagnostic tool to investigate giant cell arteritis.