Teaching NeuroImages: Sonographic “retrobulbar spot sign” in differentiating etiologies of sudden visual loss

A 61-year-old vascular patient presented with headache and subacute blindness in the left eye. Remaining American College of Rheumatology criteria were negative. Sonography of the temporal artery revealed no halo sign, but due to low sensitivity, vasculitis could not be excluded. Transorbital examination revealed hyperechogenic retrobulbar spot sign (figure), which is highly specific for embolic occlusion of the central retinal artery. Comprehensive diagnostic workup revealed paroxysmal atrial fibrillation as a putative cause for the embolus and no evidence for vasculitis. Thus, potentially harmful thrombogenic administration of steroids could be avoided. Transorbital sonography may help in cases of sudden visual loss of unclear etiology.

AUTHOR CONTRIBUTIONS
Simon Faissner: drafting/revising the manuscript, analysis or interpretation of data. Christine Grunwald: revising the manuscript, analysis or interpretation of data. Saskia H. Meves: revising the manuscript, analysis or interpretation of data. Ralf Gold: revising the manuscript, analysis or interpretation of data. Christos Krogias: drafting/revising the manuscript, analysis or interpretation of data, study concept or design, study supervision. All authors have read and approved the content of the manuscript.

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REFERENCES


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