Acute Exophthalmos-Differential Diagnosis

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Purpose
To show different pathologies causing acute exophthalmos. Acute exophthalmos is an ophthalmological emergency. Adequate imaging and diagnosis are imperative for treatment.

Materials & Methods
CT scan and MR imaging of the orbits were obtained on six patients with acute exophthalmos, referred by neuroophthalmology.

Results
Orbit pseudotumor, traumatic carotid-cavernous fistula, myositis, trauma, varix, and acute hemorrhagic melanoma are shown.

Conclusion
Most common symptoms include acute onset of painful proptosis, associated with lid swelling or a mass. Visual acuity may be reduced as well. In acute trauma ischemic changes may present. Different reports suggest that 2 hours of orbital ischemia is near the critical time limit for recovery of full visual function. Arteriovenous malformation should be considered in the differential diagnosis of rapidly progressive proptosis. Myositis is a rare orbital pseudotumor inflammatory process that infiltrates the extraocular muscles. Acute proptosis due to intratumoral bleed of orbital melanoma is a rare entity. In this paper we showed different pathologies causing acute proptosis. The first diagnostic test was performed with CT scan. When the clinical condition allowed, MR imaging was performed also. Diagnostic angiogram was included to confirm carotid-cavernous fistula. Therefore, a prompt diagnosis and treatment is mandatory.