

INSIGHTS INTO ORBITAL CAVERNOUS HEMANGIOMA: A UNIQUE CASE REPORT

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PURPOSE

The presentation of a unique case of orbital hemangioma and the description of its diagnostic approach and characteristics.

CASE PRESENTATION

A 69-year-old male patient was referred to the emergency department due to sudden onset of dysarthria and left transient hemianopia. Brain CT showed an acute ischemic infarct and, at the same time, a dense mass with mild enhancement was observed in the left orbit in contact with the optic nerve. A complete ophthalmological examination and orbital MRI with the injection of paramagnetic substance was performed to determine the aforementioned mass.

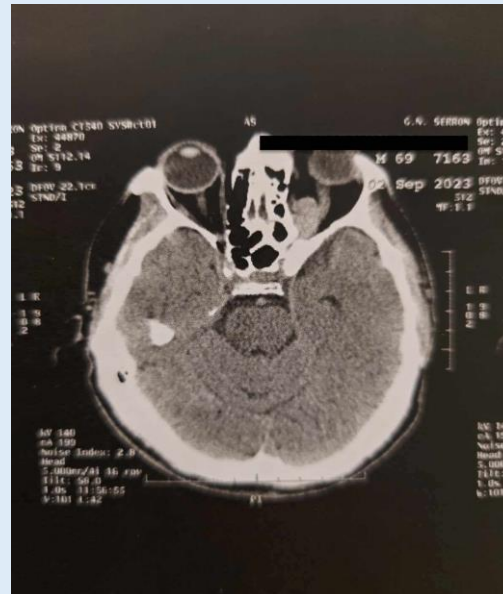
During clinical examination, his visual acuity was 6/10 bilaterally with normal anterior segments and mild cataract. The IOP was 11mmHg in both eyes. There was no left prolapse or reported diplopia. RAPD was normal bilaterally, while Ishihara plates showed left protanopia. Fundoscopy of both eyes was normal, and so were the OCT of the macula and the optic nerve.

Communication Details

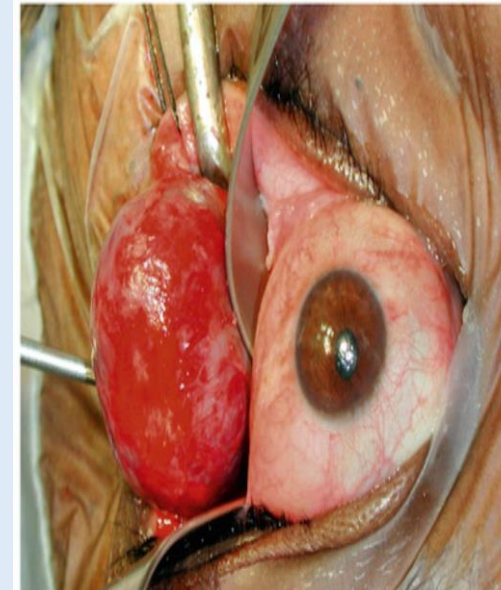
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RESULTS

The orbital MRI revealed a 15x22 mm formation in the retrobulbar fat of the left orbit with clear boundaries and intense enrichment. The lesion was compressing the left optic nerve displacing the inferior and medial rectus muscles. The finding was compatible with orbital cavernous hemangioma. The patient was examined in a follow-up visit 3 months later and showed no clinical change.



Cavernous hemangioma in our case



Surgical excision of cavernous hemangioma. Kanski's Clinical Ophthalmology: A Systematic Approach, 9th Edition

Cavernous haemangioma is a benign, slowly progressive vascular neoplasm. It commonly presents in middle-aged adults with women affected more than men. Its location is often within the muscle cone, lateral to the optic nerve. Symptoms might include slowly progressive unilateral proptosis associated with optic disc oedema, diplopia and blurring vision.

The differential diagnosis includes: peripheral nerve sheath tumors like schwannoma and neurofibroma, hemangiopericytoma, fibrous histiocytoma, solitary fibrous tumor, orbital lymphoma and melanoma. Cavernous hemangioma is diagnosed radiologically with CT, MRI and ultrasound after a thorough clinical assessment.

Management of cavernous hemangioma is dependent on the presence or absence of symptoms. Many cavernous haemangiomas are detected by chance on scans and are asymptomatic, therefore observation alone is often appropriate. Symptomatic lesions require surgical excision in most cases because they gradually enlarge.

CONCLUSIONS

Cavernous haemangioma is the most common benign orbital tumor. The detailed investigation with clinical examination and orbital CT and MRI, as it is described in our case, is necessary for the correct diagnosis and possible treatment of the tumor.

REFERENCES

1. Kanski's Clinical Ophthalmology: A Systematic Approach, 9th Edition
2. Orbit, Eyelids and Lacrimal System, Section 7. Basic and Clinical Science Course, AAO, 2020-2021, p. 75-77.
3. Calandriello L, et al. Cavernous venous malformation (cavernous hemangioma) of the orbit: current concepts and a review of the literature. *Surv Ophthalmol.* 2017;62(4):393-403.
4. [https://eyewiki.aaopt.org/Orbital_Cavernous_Venous_Malformation_\(Cavernous_Hemangioma\)](https://eyewiki.aaopt.org/Orbital_Cavernous_Venous_Malformation_(Cavernous_Hemangioma))