Orbital Echinococcosis: A Case Report

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Abstract: Echinococcosis is a zoonotic disease caused by the larval stage of the metacestode stage. Orbital echinococcosis predominantly caused by E.granulosus manifests as a unilocular cyst. Orbital involvement comprises 0.3% to 1% of all human echinococcosis and typically unilocular.

Keywords: Echinococcosis, orbital, proptosis, uniocular

1. Case Report

A 30yr old male patient presented with a massive proptosis of the right eye of 1yr duration and gradualpainless loss of vision.



Examination revealed a large nontender cystic mass with severe proptosis.



The phthisic eye was displaced down and outwards. Proptosis was about 30mm. Ocular movement was restricted in all direction of gaze.

2. Visual Acuity

OD = PL - ve PR - ve.OS = 6/9, PH 6/6.

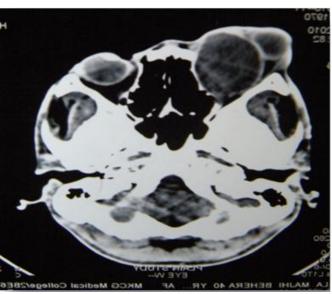
3. Intraocular Pressure

OD= Digitally soft. OS= 17.3mm of Hg.

4. CT scan

Demonstrated a single hypodense, unilocular, well-defined, thin-walled, homogenous mass with hyperdense rim.





5. Blood Investigation

No eosinophilia. ESR – 4mm/hr.

6. Abdominal Ultrasound

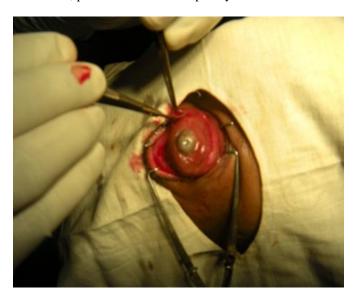
Normal.

7. Chest X-ray

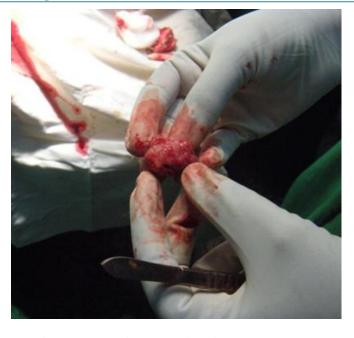
Normal.

8. Treatment

Surgical excision of the cyst was performed through transconjunctival route. The phthisic eye was enucleated. Cyst was ruptured in the middle of surgery. Later ruptured cyst wall was excised completely. Albendazole was given for 2 weeks (30 mg/ kg body wt). Postoperative period was uneventful, patient recovered completely.

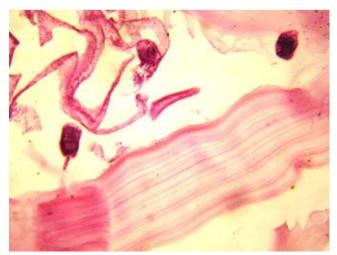


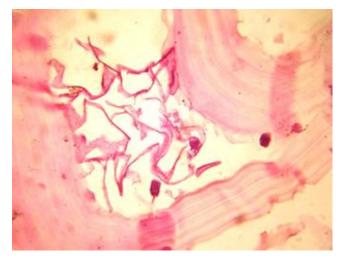


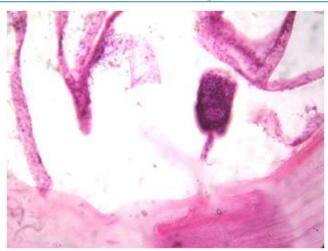


9. Histopathological examination

Showed an outer laminated periodic acid Schiff positive membrane and an inner membrane with numerous brood capsules and protoscolices attached to it.







10. Discussion

Echinococcosis is a zoonotic diseasecaused by the larval stage of the metacestode stage. Orbital echinococcosis predominantly caused by E.granulosus manifests as a unilocular cyst. Orbital involvement comprises 0.3% to 1% of all human echinococcosis and typically unilocular. The most common sites are intraconal and extraconal spaces but involvement of the extraocularmuscles and ocular tissue are also seen. Our case was extraconal involvement. Treatment modalities include surgical excision and cryoextraction. In inoperable cases oral Albendazole is given for 4- 6 weeks.

References

- [1] Polycystic echinococcosis of the orbit. Murthy R, Honavar SG, Vemuganti GK, Naik M, Burman S. Am J Ophthalmol. 2005 Sep;140(3):561-3.
- [2] Two different presentations of orbital echinococcosis: a report of two cases and review of the literature. Bagheri A, Fallahi MR, Yazdani S, RezaeeKanavi M. Orbit. 2010 Feb;29(1):51-6.
- [3] Disseminated hydatid disease in a child: albendazole treatment of orbital cyst. Papathanassiou M, Petrou P, Zampeli E, Vergados I, Paikos P. Eur J Ophthalmol. 2008 Nov-Dec;18(6):1034-6.
- [4] Orbital hydatid cysts: report of four cases. Ergun R, Okten AI, Yuksel M, Gul B, Evliyaoglu C, Ergungor F, Taşkin Y. Neurosurg Rev. 1997;20(1):33-7
- [5] Hydatid cysts of the orbit. A review of 35 cases. Gomez Morales A, Croxatto JO, Crovetto L, Ebner R. Ophthalmology. 1988 Aug;95(8):1027-32.
- [6] Orbital hydatid cyst. Report of a case followed by serial computed tomography. Turgut M, Saglam S, Ozcan OE. J ClinNeuroophthalmology. 1992 Mar;12(1):43-6.