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Case Report

An Interesting Case of Lateral Rectus Myocysticercosis of Left Eye

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ABSTRACT

An eight year old child brought to outpatient department with history of swelling of left eye since one week and increasing in its size since then. He also complained abnormal deviation of left eyeball since two days. History of blurring of vision and double vision was present. There was no pain associated with the swelling. No history of fever, vomiting, headache. On examination of left eye proptosis and ptosis was present, eyeball was pushed downward and outward. Palpebral aperture was narrowed. Eyeball movements on left side are decreased, vision was normal. CT morphology was suggestive of lateral rectus myocysticercosis. B scan on left eye showed cystic lesion in the infero temporal region of the eyeball. Patient was treated with albendazole for seven days at dose of 15mg/kg/day. Prednisolone was given at a dose of 2mg/kg/day. Swelling of eyeball subsided completely after seven days and all the movements of eyeball became normal.

KEY WORDS: *myocysticercosis; orbit; albendazole; prednisolone.*

INTRODUCTION

Cysticercosis is caused by cysticercus cellulosae, a larval form of *Taenia solium*. Human being is the intermediate host of larval stage. Taenia solium is invasive with tropism for the central nervous system in humans. muscles, eyes and subcutaneous tissue are other site. [1] Ocular cysticercosis can be extraocular or intraocular. [2] In literature only few cases have been reported where extraocular muscles have been involved, hence we are reporting this case.

CASE PRESENTATION

An eight year old child came to outpatient department with history of swelling over left eye since seven days. Swelling was increasing gradually in size. There was no associated pain. Patient also complained of abnormal deviation of left eye since two days. History of blurring of vision and double vision was present. There was no history of trauma to same eye. There was no history of fever, vomiting, headache or convulsion. Child was non vegetarian by diet, but never had history of consumption of pork. On opthalmic examination right eye was normal. On left side proptosis, ptosis was present, eyeball was pushed downwards and outwards. Palpebral

aperture was narrowed vertically, subconjunctival haemorrhage was present, movements of eyeball are decreased on medially, superiorly and inferiorly. The movemet of left eyeball was restricted on lateral sid(fig 1). Fundoscopy and vision was normal on both sides. CT scan of orbit showed diffuse enlargement of belly of lateral rectus on left side, which showed heterogenous density. Two small hypodense cyst like lesion are seen with small intralesional solid nodule, one of which shows calcification. CT morphology was suggestive of lateral rectus myocysticercosis (fig 2). B ultrasound scan on left eye showed cystic lesion in the infero temporal region of the eyeball. Blood parameters were within normal limits. Blood culture did not grow any organisms. Patient was treated with prednisolone 2mg/kg/day and albendazole 15mg/kg/day for seven days. After three days of treatment, swelling of left eyeball started regressing. Range of movements of eyeballs showing improvement on left side. There was complete resolution of swelling after seven days of treatment (fig 3). Patient was discharged with an advice to follow up regularly for any recurrence of cysticercosis.

Fig 1. Showing ptosis, swelling, of left eyeball.

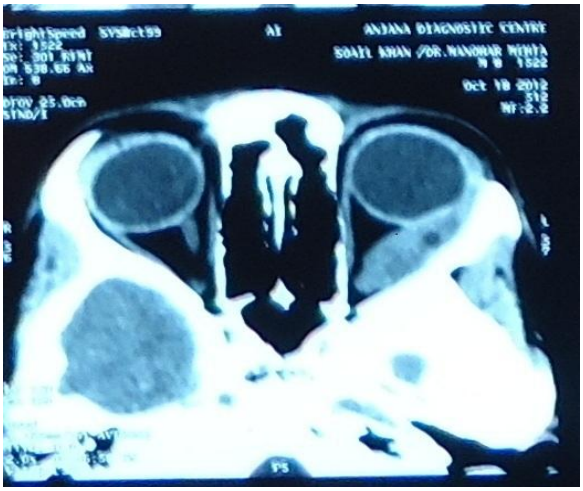

Fig 2. CT scan showing two small hypodense cyst like lesion seen with small intralesional solid nodule, one of which shows calcification.

Fig 3. Child after completion of treatment.

DISCUSSION

Cysticercosis is caused either by ingesting of food or water contaminated with eggs of T. *solium.* The risk of cysticercosis may be the same for individuals who eat or do not eat pork. In the small intestine, the eggs release an oncosphere that crosses the gut wall and spreads hematogenously to many tissues, primarily brain and muscle. [1] In the eye cysticerci may be situated intraocular or extraocular intraocularly, cysticerci can occur in vitreous body and subretinal. [3,4] Cysticerci may also be found in anterior chamber and subconjunctiva. [5,6] Squint,

double vision, recurrent redness, and painful proptosis are some of the clinical signs in patients with orbital cysticercosis. One or more extraocular muscles may be involved simultaneously, more commonly the involvement of the superior rectus muscle and the lateral rectus muscles has been reported. [7,8] Diagnosis can be arrived at by doing B-scan ocular ultrasonography which reveals a well-defined cystic lesion with clear contents and a hyperechoic area suggestive of a scolex. [9] The characteristic feature on CT scan is a hypodense mass with a central hyperdensity suggestive of the scolex. Usually, a solitary cyst with wall enhancement is observed. [10] Albendazole and oral corticosteroids are used for treatment. [8] A randomized clinical trial reported a marked clinical response with oral albendazole. [11] Resolution of cyst can be recognized by disappearance of scolex. Serial B scan ocular ultrasonography or CT scanning of orbit help in identifying resolution.

CONCLUSION

Cysticercosis is a preventable disease which can be prevented by good hygiene, hand washing, washing raw vegetables and fruits before consumption and avoiding consumption of undercooked pork. With adequate treatment, the prognosis is good in most individuals with orbital cysticercosis as the cyst resolves. Medical therapy, consisting of oral albendazole and corticosteroids, can arrest recurrent inflammation and improve ocular motility.

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