

"Cysticercosis Cellulose of Upper Eyelid"- A Case Report

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Abstract

Presentation of one case of extraocular muscle enlargement caused by cysticercosis, its clinical, diagnostic and treatment aspects. The case was not responding to the routine medical treatment given in a cysticercosis case.

Cysticercosis is a parasitic infestation caused by larval stage of the pork tape worm *Taenia solium*, which can develop in any organ in human beings it is more commonly seen in the skin, subcutaneous tissue, brain & rarely in eyelid. The disease is most prevalent in countries where pigs feed on human feces. A case of Cysticercosis cellulose in a pure vegetarian girl is reported here of its rarity. A girl aged 6 years presented with cystic swelling over left upper eyelid. A clinical diagnosis of dermoid cyst was offered. Histopathological it was reported as a case of Cysticercosis cellulose.

Key words

Cysticercosis, parasite,eyelid,brain.

Introduction

Cysticercosis is a parasitic infestation caused by larval stage of the pork tapeworm *Taenia solium*. Cysticercosis can develop in any organ within man, but is more commonly found in the skin, subcutaneous tissue, and Brain and uncommonly upper eyelid.

The disease is most prevalent in countries where pigs feed on human feaces[7].

Case report

6 Years old girl presented with 1x1 cm diameter cystic swelling over left upper eyelid since 2months, which was mobile and translucent. No history of pain, tenderness and redness or discharge from left eye. A clinical diagnosis of dermoid cyst was offered. After histopathological diagnosis. Diet history revealed 6 years old girl was pure vegetarian and comes from an agriculture family

Pathology

Fig. 1

Showing cyst over the left upper eye lid.



Gross Features:

Cyst is ovoid and white to opalescent ,measuring 1x1 cm, cut section shows clear fluid in cyst lumen and smooth cyst wall. Cyst lumen containing clear fluid with a tiny grayish white area.

Microscopy:

Histopathological examination of cystic swelling of upper eyelid revealed three distinct layers the outer most zone formed by dense fibro vascular layer showing large histiocytes intermingled with fibroblasts and an inner layer containing epitheloid cells, lymphocytes, plasma cells, neutrophils and multi nucleated giant cells. The scolex with suckers and double row of hook lets is a prominent feature.

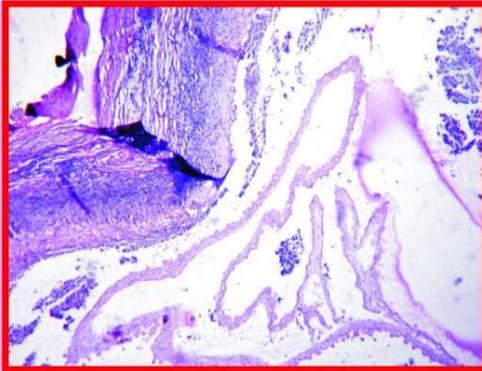
Microphotograph:

Fig.1- outer most zone formed by dense fibrovascular layer showing large histiocytes intermingled with fibroblasts & also cutis(100xH & E)

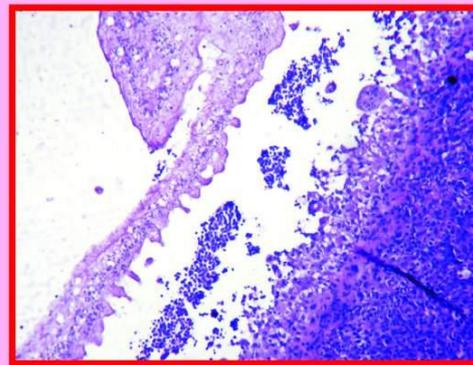


Fig.2- inner layer containing epitheloid cells, lymphocytes, plasma cells, neutrophils and multi nucleated giant cells. (100xH & E)

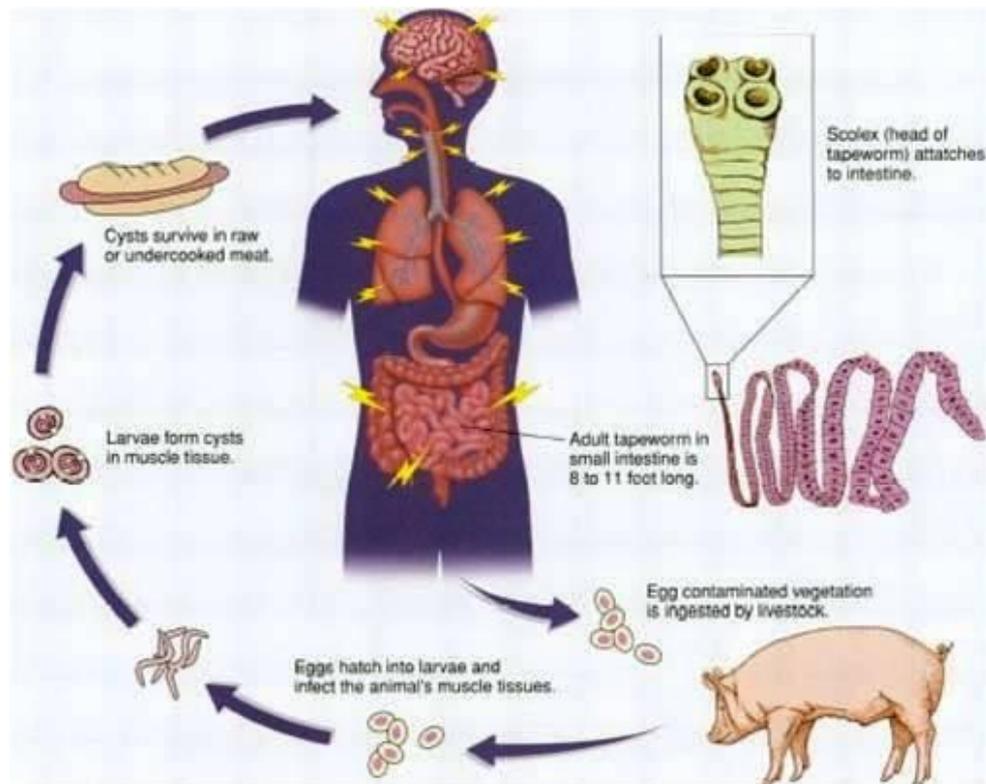


Fig.3- The scolex with suckers and double row of hooklets (400x H & E)

Discussion:

Cysticercosis is a serious health problem in developing countries like Latin America, Asia, and Africa especially in area of poverty and poor hygiene [1-2]. It has a world prevalence of 50 million and leading to 50,000 deaths each year. [2] As per the Indian literature, ocular involvement occurs in 1.8 -4.5 % cases only, the ocular adnexa being the preferred site [3]. It has been primarily reported in paediatric and young adult population [4]. Inferior Rectus was commonly involved in one study [5] but in our case Medial Rectus was involved. The predominant symptoms in patients with extra-ocular muscle involvement are protrusion of globe, pain, diplopia, ptosis and diminution of vision but our patient presented with headache which could be due to release of toxins around the degenerating cyst. Our case suggests that a high index of suspicion should be entertained for extra-ocular muscle cysticercosis in every case of recurrent headache especially in child. Brain parenchymal involvement was not seen in our patient as seen in most of the studies of ocular cysticercosis [6].

Human infection with Cysticercosis are due to ingestion of eggs in contaminated food or drink [7,8,] or by reverse peristalsis of eggs or proglottides from the intestine to stomach . Oncospheres hatched by eggs enters the general circulation and form cysts in various parts of the body. Cysticercosis in the eyelid is usually seen as a painless enlarging mass[9].



Probable mode of infection in our patient may be ingestion of contaminated vegetables which are grown on pig feces as organic manure, an agriculture practice prevalent in northern Karnataka[7,10].

Conclusion

Our case therefore serves to emphasize that cysticercosis should be included in differential diagnosis of extra-ocular muscle enlargement for early recognition and adequate treatment .

Conflict of interest

The authors wish to state that they have no conflict of interest that might improperly influence this work. This study was unfunded.

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