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Original Research Paper

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SOLITARY CHIN CYSTICERCOSIS: A REPORT OF AN UNUSUAL CASE

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ABSTRACT Cysticercosis, is caused by the infestation of larvae of Taenia solium (pork tapeworm). Solitary involvement of head and neck is quite unusual. Here we report a cases, of a middle aged woman presenting with isolated chin involvement.

KEYWORDS : Cysticercosis, Head and neck cysticercosis, Taenia solium, Tape worm.

INTRODUCTION

Cysticercosis is a helminthic disease results from extra intestinal encystation of the larval form of parasite Taenia solium, seen commonly in developing countries like India, Indonesia, China, Africa, Peru, Mexico, where there is poor access to sanitation facilities and close interaction between humans and animals. It has also become an important disease in developed countries, such as the United States with a large immigrant population.[1-4] This condition rarely involves musculature of the facial region and can pose a difficulty in clinical diagnosis.

Here we present a case of a female patient who had a painless swelling over the chin which on histopathological examination turned out to be cysticercosis.

CASE REPORT

A 45-year-old female presented with a swelling over the chin since 4 months. On examination it was measuring around 2x2cm in size, firm to cystic in consistency, non-tender and mobile. There were no palpable cervical lymph nodes. The patient had no headache, seizure, or any focal neurological deficit. On ultrasound examination (USG), there was a well-defined hypoechoic area measuring 2 cm × 1.75 cm and containing a small echogenic mass.

Based on these clinical and radiological features, pre-operative provisional diagnosis of an epidermoid cyst was made.

Cyst was excised and sent for histopathologcal examination. Grossly specimen was approximately 2cm × 2cm in diameter. Cut section was cystic filled with serous fluid with areas of degenerative changes and fibrosis.

Microscopic examination showed the lesion consisting of structure resembling cysticercus with degenerative changes and presence of calcareous corpuscles surrounded by sparse inflammation, skeletal muscle and areas of fibrosis. (Figure 1) Based on these findings diagnosis of myocysticercosis was made.

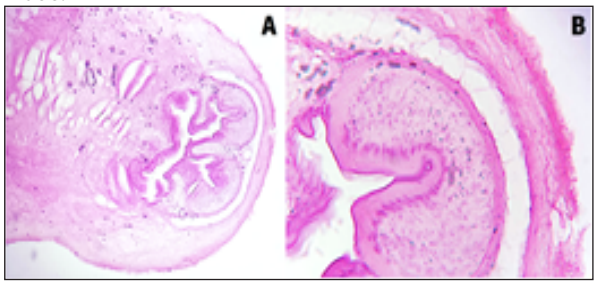

Figure 1: A. Low-power view showing the cysticercus with duct-like invaginations. (H&E, x100). B. High power view showing eosinophilic membrane and sucker (H&E, x400)

The patient underwent CT scan of the brain, and neurocysticercosis was ruled out. Albendazole with a dosage of 15mg/kg per day was given for 8 days. Two month follow-up of the patient was uneventful.

DISCUSSION

Cysticercosis is a parasitic disease caused by the infestation of the larvae Taenia solium. Humans are the definitive host of the adult form of the Taenia solium tape worm and pigs are the intermediate host of the larval stage. However, humans can become an accidental intermediate host of T. solium when viable eggs of the parasite are ingested. The eggs of this parasite are usually present in unwashed and undercooked vegetables [6,7]. When humans ingest eggs or gravid proglottids from the parasite Taenia solium, the covering of the eggs is digested in the stomach and the larval form (cysticercus cellulosae) of the parasite is hatched . The larvae penetrate the mucosa, enters the blood vessels and lymphatics, and are distributed in the tissues all over the body but preferentially locate in the brain, muscle, skin, liver, lungs, and heart [8]. They are also found in oral and perioral tissues, particularly in the muscles of mastication, facial expression, the suprahyoid muscles, and the postcervical musculature as well as in the tongue, buccal mucosa, and lip [6,9,10].Cysticerci are spherical milky white cysts containing fluid and a single invaginated scolex with hooklets [8]. The growing larva in cysticercosis may provoke a series of inflammatory reactions including infiltration of neutrophils and eosinophils, lymphocytes, plasma cells and at times giant cells, followed by fibrosis [11] in the present case inflammatory response was minimal with more of degenerative changes and areas of fibrosis.

Cysticercosis is hardly included in the pre-operative differential diagnosis due to the relative rarity of the condition, inadequate knowledge of parasitic infections [12]. The treatment includes surgical enucleation and potent antihelmenthics like albendazole and praziquantel [1,13]

CONCLUSIONS

It is important to consider the diagnosis of cysticercosis in cystic lesions of head and neck region. Histopathological examination of excised specimen is of utmost value in confirming the diagnosis.

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