Cutaneous Cysticercosis - A Rare Case Report

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ABSTRACT

Cysticercosis is caused by Cysticercus Cellulosae, which is the larval stage of a tapeworm, Taenia Solium in humans. This larva commonly affects the central nervous system, but it can involve eyes, muscles, lungs, liver, subcutaneous tissues and heart with variable clinical manifestations. Here we report a rare case of cutaneous Cysticercosis of the left scapular region without any associated neurological or eye involvement in a 50 year old male patient. He was managed with albendazole and steroids with complete recovery.

Keywords: Cysticercus Cellulosae, Taenia Solium, Cutaneous Cysticercosis.

INTRODUCTION

Human cysticercosis is a parasitic infection caused by the larval form of Taenia Solium, known as Cysticercus Cellulosae. Arora et al described the first case of cutaneous cysticercosis in 1990 in India.[1] Now few cases of intramuscular cysticercosis without affecting the other organs have been reported in the literature.[2-4] Soft tissue cysticercosis lesions have been usually reported with brain or eye involvement.[5,6] We report a case of 50 year old male patient with swelling of left scapula without any neurological or ocular involvement.

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CASE REPORT

A 50 year old male, nonalcoholic, vegetarian, a labourer by profession, presented with solitary swelling over the left scapular region since four weeks. The swelling was 4cm×3cm nodular insidious in onset, painless, non fluctuating, non reducible, well defined, soft to firm in consistency with non attachment to underlying muscle. There was no history of fever, cough or convulsions. The systemic and physical examination was unremarkable. Laboratory profile, stool examination for ova and parasites, X-ray chest and radiograph of the left scapular region was normal. The patient refused fine needle aspiration biopsy (FNAB), ultrasonography (USG) of the given swelling revealed 2 × 1.5 cm over the left scapular area, central cystic part with evidence of echogenic scolex suggestive of intramuscular cysticercosis. Computed tomography (CT) brain and ophthalmic examination were normal. The patient was managed with oral prednisolone for seven days. Albendazole was started 28 days after giving a course of steroids for three days. On follow up at one month, the swelling disappeared with no new swelling or symptoms.

DISCUSSION

Human cysticercosis is a major health problem worldwide and is highly prevalent in African, Eastern Europe, Mexico and South East Asian regions.[5] It occurs only in humans after ingestion of undercooked pork infected with cysticerci or vegetables, drink, contaminated with Taenia Solium eggs. Man is the definitive host, who harbors the adult worm while the pig is the intermediate host, who harbors the larval stage - cysticercus cellulosae following ingestion of eggs, oncospheres (embryo) in the eggs released by the action of gastric hydrochloric acid, penetrate the intestinal wall, enter the blood stream to reach various organs and muscles.[7,8] Clinical features vary depending upon the site of larval invading, larval load, extent of involvement, type of organ involvement and host reaction. The symptoms may occur 5 years after infection, but may appear even after 10-30 years.[10] Autoinfection occurs mostly by hand and mouth with person's own faeces. Intramuscular cysticercosis presents with 3 types: myalgic type, the mass like, pseudotumour type or abscess type and the rare pseudohypertrophic type.[2] Our patient presented with nodular /mask like swelling. Intramuscular cysticercosis is usually asymptomatic as seen in our case FNAC or FNAB is helpful to make the diagnosis. But our patient did not consent for it. On USG, cysticercosis usually appears as a cyst with an eccentric echogenic scolex as documented in our case. But there can be often variable appearances on USG.[1,9,10] CT and Magnetic resonance imaging (MRI) are useful in anatomical localization of the cysts. Radiograph can reveal multiple calcifications in the muscles or subcutaneous tissues if the cysts are calcified.[6]

Stool examination for ova and parasites may reveal concomitant intestinal parasitic infection. It has been reported that the sensitivity of serological tests is higher for patients with multiple cysts (94%) as compared to patients with a single cyst (28%) or calcified cysts.[11] Albendazole and Praziquantal are cysticidal drugs used for neurocysticercosis and subcutaneous cysticercosis. Steroids should be added to avoid any anaphylactic reaction which may occur due to the massive release of larval antigens.[12] Differentials for soft tissue cysticercosis include lipoma, epidermal cyst, fibroma, myositis, intramuscular abscess, cold abscess.

CONCLUSION

Although cysticercosis commonly involves the central nervous system, but it can affect other unusual sites like skeletal muscles, eye, heart, lungs, liver and subcutaneous tissues. In endemic areas like ours, intramuscular cysticercosis should be thought of as a possibility whenever a patient presents with swelling or nodule over the body. Appropriate radiological investigations, FNAC or FNAB should be performed for establishing the diagnosis. Public health education regarding personal hygiene and proper handling techniques must be encouraged.

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