

Subcutaneous Cysticercosis in the Inguinal Region- A Case Report**Narsinha Vamanrao Kulkarni¹, Sheela Narsinha Kulkarni², Priti Dnyaneshwar Katkade³**¹Professor, Department of Surgery, MAEER's MIMSR Medical College, Latur, PIN -413531, India²Professor, Department of Pathology, MAEER's MIMSR Medical College, Latur, PIN – 413531, India³Resident, Department of Pathology, MAEER's MIMSR Medical College, Latur, PIN – 413531, India***Corresponding author**

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Abstract: Cysticercosis is the major health problem in developing world. The skeletal muscles, subcutaneous tissue, eyes and CNS are the most frequently affected sites. Other reported sites are heart, lungs, peritoneum, kidney, liver and pancreas. In this report we document an isolated lesion of cysticercosis presented as a subcutaneous swelling in inguinal region.**Keywords:** Cysticercosis, Taenia Solium, Inguinal region.

INTRODUCTION

Cysticercosis is a parasitic infection caused by cysticercus cellulose, the larval form of pork tapeworm Taenia Solium. The definitive host is man and intermediate host is pig. Human beings get infected through the eating of undercooked pork containing cysticercus cellulosae. Man occasionally serving as the larval host of Taenia Solium, becomes infected in the same way as pig, either by drinking contaminated water or by eating undercooked vegetables infected with eggs. Man harbouring the adult worm may auto-infect himself due to unclean and unhygienic personal habits. These cysticerci are usually found in tens of thousands but sometimes singly. They may develop in any organ and the effect produced depends on location of the cysticerci in the body. The common sites are brain, subcutaneous tissue and muscles [1]. Other reported sites are heart, lungs, peritoneum, kidney, liver and pancreas. Children are commonly affected because of increased chances of fomite infection [2].

The clinical features of cysticercus cellulose may vary. It may be asymptomatic or symptomatic. In human cysticerci most commonly come to our attention when they occur in the central nervous system. Subcutaneous cysts are easily palpated and surgically removed usually for purpose of diagnosis [3]. Solitary muscular and soft tissue involvement without central nervous system involvement is rare and often presents a diagnostic challenge [4]. We present a case of cysticercosis as a solitary cystic swelling in the inguinal region of a 40 year old male a very rare occurrence.

CASE REPORT

A 40 year old non vegetarian Hindu male, teacher by occupation presented with a swelling in the

right inguinal region which was gradually increasing in size for the last 1 year. The swelling was 1.0 cm in diameter, firm, well circumscribed, non tender and freely mobile. The skin overlying the swelling was normal. The patient gave past history of varicocele surgery on left side nine years back for oligoasthenozoospermia. General and systemic examination was within normal limit. Implantation dermoid and fibroma were kept as a differential clinical diagnosis and excision biopsy was performed.

Pathological findings

Gross – a single gray white cystic mass measuring 1cm in diameter, on cut section was cystic containing small amount of clear fluid.

Microscopy – the section shows a cyst within which lies a distinct cysticercosis. The cyst wall shows infiltration of lymphocytes and eosinophils.



Fig-1: section showing parasitic cyst wall with scolex of cysticercus (H&E stain X 400).

DISCUSSION

Cysticercosis is a major health problem in the developing world. *Cysticercus cellulose*, the larval form of *Taenia Solium* gets established in tissues as fluid-filled cysts thereby evading the immune response of the host. The intramuscular and subcutaneous cysticercosis is seen commonly over arms and chest and is characterized by multiple, mobile, firm subcutaneous nodules [2]. Subcutaneous cysticercosis is frequently asymptomatic but may manifest as palpable nodules.

In our case 40 year old male presented with solitary subcutaneous swelling in right inguinal region suspected implantation dermoid or fibroma and histopathology revealed cysticercosis. Amatya and Kimula described the clinical and histopathological features of cutaneous cysticercosis in 62 cases from Nepal. 82% presented with solitary skin nodules, another 10% with nodule in the oral mucosa and 8% in the breast [5]. Munjal S *et al.* reported lingual cysticercosis presenting as an isolated lesion in 16 year old male. She includes neurofibroma, inclusion and fibroma as a differential clinical diagnosis in her case report [6]. Parvati Devi reported solitary subcutaneous cysticercosis presented as a nodule in left lumbar region in 39 year old male with clinical diagnosis as neurofibroma [7]. Solitary abdominal wall cysticercosis was reported by Khan RA *et al.* in 7 year old boy brought by his mother with a complaint of painless nodule on right side of the abdomen below costal margin [2]. A solitary cystic nodule inside the lower lip in 40 year male was reported by Patel K.*et al.* [8]. Vujhini SK *et al.* reported a solitary lump in rt. axillary region in 18 year old girl, suspected clinically as fibro adenoma. Histopathology revealed cysticercosis [4].

Cysticercosis is rare as an isolated presentation without involvement of any other system or site. Central nervous system, ocular and other systems must be evaluated. Various diagnostic methods such as CT scan, MRI scan, serology can be used. Certain preventive measures like maintaining good personal hygiene, adequate sanitation, washings fruits and vegetables before eating and refraining from consumption of unclean food is recommended.

CONCLUSION

Cysticercosis in inguinal region is rare and poses a diagnostic challenge clinically. This case emphasizes the role of the consultant doctor in the detection of disease that can have more serious involvement, as well as the importance of routine histological examination.

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