

CASE REPORT ON A RARE CASE OF MUSCULOSKELETAL HYDATID INFECTION

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Article Received on 09/03/2023

Article Revised on 29/03/2023

Article Accepted on 19/04/2023

ABSTRACT

Human hydatid infection can occur in several locations leading to cyst formation, of which most common site is liver and rare sites include musculoskeletal system. We report a case of musculoskeletal hydatid infection which was diagnosed using MRI as the modality. Awareness about the rare presenting sites of hydatid infection is important for early diagnosis and treatment as follows.

INTRODUCTION

Hydatid infection in humans is caused by *Echinococcus granulosus*. South America, China, Africa, and European Mediterranean countries it is highly prevalent.^[1]

The two main species are:^[2]

- *Echinococcus granulosus*: It is more common
- *Echinococcus multilocularis*: It is more invasive but less common

Humans are accidental hosts and usually gets infected by ingestion of contaminated eggs.^[3]

Musculoskeletal hydatidosis is very rare.

CASE REPORT

A 31 year old female presented with a painless swelling in her left gluteal region for few months. On physical examination, the patient had a well defined swelling without tenderness.

On MRI evaluation,



Fig. 1: T1WI reveals numerous hypointense cystic lesions with isointense intercystic matrix.

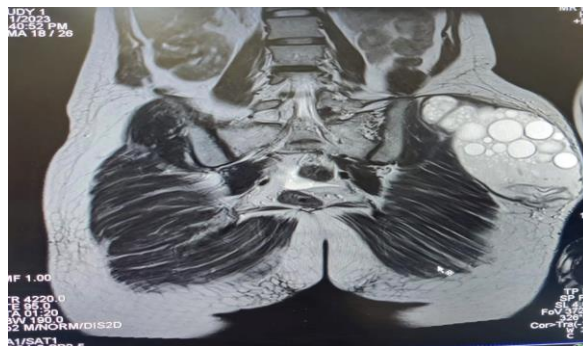


Fig. 2: T2WI reveals hyperintense cystic lesions with slightly hyperintense intercystic matrix with demonstration of detached membranes.

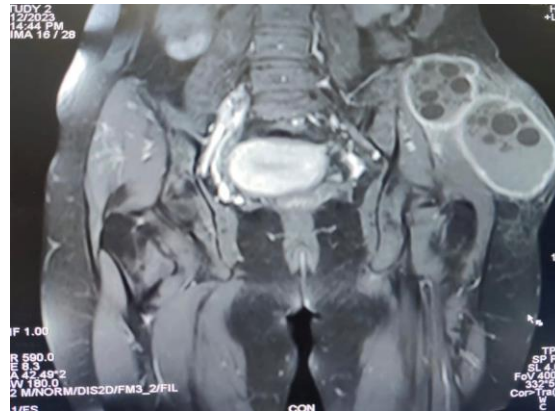


Fig. 3: On post contrast study, Peripheral enhancement is seen.



Fig. 4: DWI reveals areas of diffusion restriction.

There is a large well defined cystic lesion in subcutaneous and intramuscular plane of left gluteal region, involving gluteus maximus and medius muscle measuring approx. (89x77x101) mm. It is composed of numerous cysts with variable sizes which appears hypointense on T1, hyperintense on T2 with peripheral enhancement of contrast, without any enhancement of the intercystic spaces. On DWI, areas of diffusion restriction is seen.

The features suggested hydatid disease of intramuscular and subcutaneous location.

DISCUSSION

The cyst has three parts:^[1,2]

Endocyst: scolices and the membranes are formed

Exocyst

Pericyst: Part of host which comprises of inflammatory tissues

Treatment options includes:^[4]

- Watch and wait for inactive and silent cysts
- Chemotherapy
- Surgical excision
- PAIR (Puncture, Aspiration, Protoscolicidal agent injection and Reaspiration)

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