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#### Dr. Mohamed Fazal Jukaku

Final Year Post Graduate Resident, Fr. Muller Medical College Hospital, Mangalore, Karnataka, India

# Dr. Ronald Joseph Menezes

Fr. Muller Medical College Hospital, Mangalore, Karnataka, India

# Hydatid masquerade: A case of hydatid disease of the hip joint

# Dr. Mohamed Fazal Jukaku and Dr. Ronald Joseph Menezes

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#### Abstract

Hydatid disease of the bone represents about 1-2.5% of all human hydatid disease. Hydatid disease of bone is uncommon. We present a rare case of echinococcal infection of pelvis which presented as painful limp in the left lower limb with selling in the inguinal region.

Keywords: Hydatid masquerade, hydatid disease, hip joint

### Introduction

Presenting a case of 65-year-old male, agriculturist by profession, who came with complains of progressive swelling of the left inguinal region with limp of the left lower limb for 2 years, following an alleged history of slip and fall. One month back he developed pain in the left hip and inability to bear weight over the left lower limb.



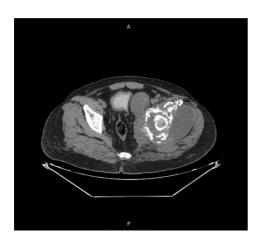
On examination there was a soft cystic swelling with well-defined margins which was fluctuant, palpated over the left inguinal region measuring 5x15cms. Tenderness was elicited over the left greater trochanter with thickening. There was also true shortening of left lower limb of 3cms which was attributed to the supra-trochanteric region. Range of movements were full but terminally painful.

Routine blood investigations showed a high ESR.

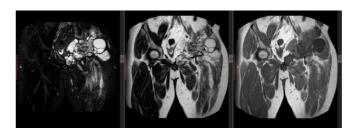


Correspondence
Dr. Mohamed Fazal Jukaku
Final Year Post Graduate
Resident, Fr. Muller Medical
College Hospital, Mangalore,
Karnataka, India

An X ray of pelvis showed multiple cystic lesions involving the left pelvic region, head, neck and proximal femur with hazy background. Differential diagnosis considered at this stage were malignancy, tuberculosis. A CT was done which showed honey coomb appearance of the left hip and proximal femur



Subsequent MRI revealed multiple soft tissue multiseptated cystic lesions in periarticular region around left hip many of them showing internal T2 hypointense debris and T2 hyperintense daughter cysts- suggestive of hydatid disease of bone and soft tissues.



Patient was started on Tab Albendazole 400mg per day which was continued for a period of 2 weeks.

He underwent cyst excision; intraoperatively daughter cysts were identified which confirmed the diagnosis. Post operatively Tab Albendazole was restarted. Patient was discharged after completion of 4 weeks of therapy.



Swelling exposed intraoperatively



Skin incision and suctioning of fluid material



Semisolid fluid material removed completely





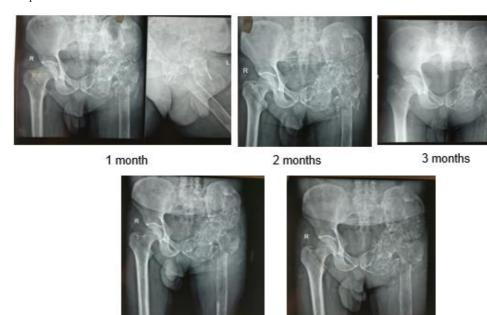
Post evacuation instillation of chlorhexidine solution



Removed cyst wall and daughter cysts



Albendzole 300mg BD X 4 weeks



5 months 7 months

He is on regular monthly follow up with 4 weeks of chemotherapy at 2 weekly intervals. Clinically over the course he showed improvement of symptoms, was made to weight bear after 2 months of the surgery. Periodic X rays were taken that showed gradual reduction in the haziness. This case is presented for the rarity of the disease, the role of MRI and its characteristic findings in diagnosing the disease and the role of chemotherapy as an adjunct to surgical

# **Discussion**

management.

Hydatid disease is caused by the Larval forms of Echinococcus granulosus and Echinococcus multilocularis. Hydatid disease of musculoskeletal system is rare, representing 1-2.5%  $^{[1]}$  of all cases

- The overall incidence of organ infestation is greatest in the liver (50–77%) and lungs (8.5–43%) <sup>[2]</sup>. Involvement of the central nervous system occurs in about 3% of all hydatid disease <sup>[3, 4]</sup>. The incidence of bone echinococcosis disease is much lower, about 0.5–4% of the total reported cases, and is most commonly seen in the spine (from 50% to >60%), followed by the femur, tibia, humerus, skull, and ribsSpine, pelvis, hip: 60%; Long bones: 28%, Scapula & ribs: 8% <sup>[5]</sup>.
- Primary hydatid disease of bone occurs through blood borne scolex which infects the bone
- ➤ In bone there is no pericyst formation, aggressive proliferation occurs along the line of least resistance. Usually presentation is around 40 years of age. <sup>[6]</sup>.
- ➤ Patients usually present with a pathological fracture or a secondary infection of the cystic mass.

# A simplified treatment protocol is as follows:

- Surgery + Chemotherapy
- Surgery: Radical excision with wide safety margins.
- > Chemotherapy: Benzimidazoles
- ➤ Albendazole- 10 mg/Kg body weight
- ➤ Mebendazole: 40 mg/ kg body weight
- Duration of treatment: 24 weeks
- Minimum: 6 course, 4 weeks course with 2 weeks gap in between each.
- ➤ At least 1 course preoperatively.

Hydatid disease of the musculoskeletal system should be considered in the differential diagnosis of atypical aggressive infections in endemic areas. Radical excision with wide safety margins along with appropriate chemotherapy are necessary to treat the disease.

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