



**ORIGINAL RESEARCH PAPER**

**General Surgery**

**A RARE CASE OF LEFT THIGH HYDATID CYST.**

**KEY WORDS:**

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**ABSTRACT**

Hydatid cyst is a parasitic disease caused by *Echinococcus granulosus* that is endemic in the Mediterranean countries, the Middle East, South America, Australia, New Zealand and East Africa. It is a zoonosis that occurs primarily in sheep grazing areas, with dog being the definitive host, sheep the intermediate host and Humans being an accidental hosts who contract the disease from dogs, but there is no human to human transmission. More than 90% of hydatid cyst occur in the liver, lungs or both. Peripheral organ hydatidosis is less common, as only few embryos can escape the capillary filtering system of the liver and the lungs. Theoretically the high Lactic Acid level in muscle tissue is considered unfavourable for survival of parasite. Primary Hydatid disease of the skeletal muscle is present in approximately 3% of the patients. Approximately 75% of hydatid cyst are located in Right lobe of Liver. Ultrasound is most commonly used for diagnosis worldwide. CT and MRI scans are also helpful. The treatment is primarily surgical. In selected patients PAIR (puncture, aspiration, injection and reaspiration) has been accepted. Albendazole or Mebendazole therapy is given pre-operatively as well as post-operatively. The aim of this study is to report an unusual case of intramuscular ydatid cyst in the left medial side of the thigh. According to the world literature search only a few cases have been reported.

**INTRODUCTION**

Hydatid cyst is a parasitic disease caused by *Echinococcus granulosus* that is endemic in the Mediterranean countries, the Middle East, South America, Australia, New Zealand and East Africa. It is a zoonosis that occurs primarily in sheep grazing areas, with dog being the definitive host, sheep the intermediate host and Humans being an accidental hosts who contract the disease from dogs, but there is no human to human transmission. More than 90% of hydatid cyst occur in the liver, lungs or both. Peripheral organ hydatidosis is less common, as only few embryos can escape the capillary filtering system of the liver and the lungs. Theoretically the high Lactic Acid level in muscle tissue is considered unfavourable for survival of parasite. Primary Hydatid disease of the skeletal muscle is present in approximately 3% of the patients.

Approximately 75% of hydatid cyst are located in Right lobe of Liver. Ultrasound is most commonly used for diagnosis worldwide. CT and MRI scans are also helpful. The treatment is primarily surgical. In selected patients PAIR (puncture, aspiration, injection and reaspiration) has been accepted. Albendazole or Mebendazole therapy is given pre-operatively as well as post-operatively. The aim of this study is to report an unusual case of intramuscular ydatid cyst in the left medial side of the thigh. According to the world literature search only a few cases have been reported.

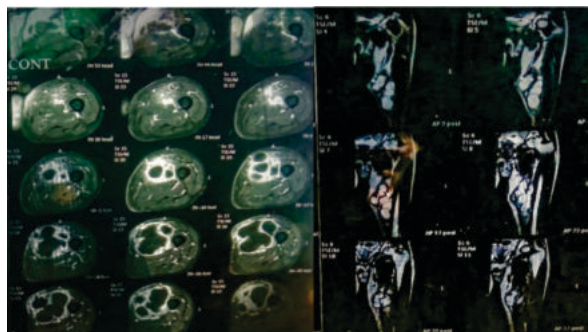
**Case Summary**

A 65 year old male presented to the OPD with a painful swelling in the inner aspect of the left thigh for the past 10 months which was gradually increasing in size. There was no relevant history of trauma or fever. On examination, there were two non tender, firm swellings of approximately 10x7 cm and 3x2 cm with smooth well defined margin seen in the left medial aspect of the mid thigh with no fluctuation or transillumination in the swelling. Routine blood investigations were done which were normal.

Ultrasonography revealed a large well defined multiloculated cystic lesion of 121 x 86 mm with multiple internal smaller cysts and intervening septa in muscular plane of medial compartment of thigh, suggesting a possibility of hydatid

disease. Since patient was stable he was further investigated to confirm the diagnosis. Magnetic Resonance Imaging (MRI) revealed a 55x75x137 mm sized multicystic lesion in the adductor compartment in medial part of left thigh extending into subcutaneous plane with no extension into intraosseous or adjacent joint cavity with peripheral post contrast enhancement suggesting possibility of Hydatid Cyst.

On exploration, multiple cystic masses were revealed once the incision was placed over the swelling and the content was sent for histopathological examination. After drainage, the cavity was instilled with Scolicidal agent (Cetrimide). Histopathological examination, revealed the same findings. The post operative period was uneventful and the patient was discharged on Albendazole 400 mg twice daily and he was found healthy 2 months after operation. Pre operative images MRI wound after 3 months On exploration





### DISCUSSION

The prevalence of muscular hydatid disease is not well determined. It has been postulated to be around 3%. Muscular Hydatid disease could be secondary or primary. In the former type hydatid cyst should be reported in at least one of the common sites of hydatid disease like liver, lung or spleen. In this case, there was no evidence of hydatid cyst in any of the primary sites. This suggests it could be a case of primary muscular hydatidosis. Up to date, 18 cases of hydatid disease of thigh have been reported in the literature. The age ranged between 8 to 61 years. Ten patients were female. Left side was affected more than right side (11 on left side). The unique character of Hydatid Disease in any area of the body is that the worm can stay silently for a long period of time (months to decades) without causing specific symptoms. Either it is diagnosed incidentally or causing pressure symptoms making the patient seek medical advice. Preoperative diagnosis of subcutaneous Hydatid Disease is crucial. Sensitivity of serological tests depends on the type of hydatid disease which is positive in 90% of patients with hepatic hydatidosis. In atypical cases, ultrasonography can diagnose hydatid disease with 100% sensitivity and specificity. MRI is the diagnostic tool of choice because of detailed information about soft tissue structure and relationship. Surgical resection in toto is the definitive management strategy. In the current case no involvement of lung, liver or spleen was found, which suggests possible primary muscular hydatid disease, although it is more common in endemic areas.

### CONCLUSION

In conclusion, hydatid cyst of thigh is a very rare parasitic manifestation presenting as a painless swelling, diagnosed typically by MRI and managed by radical excision to avoid recurrence.

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