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RESEARCH ARTICLE

GLUTEAL HYDATID CYST PRESENTING AS AN ABSCESS: RARE CASE REPORT

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Abstract

Background: Hydatid disease is a parasitic infection primarily affecting the liver and lungs. Muscular involvement, especially in the gluteal region, is rare.
Case Presentation: A 30-year-old woman presented with a left gluteal cystic lesion confirmed as a hydatid cyst through imaging and histopathology. Surgical excision and albendazole therapy led to a successful outcome.
Conclusion: Awareness of atypical hydatid disease presentations is crucial for timely diagnosis and treatment, particularly in endemic areas like Morocco.

Introduction:-

Hydatid disease, also known as echinococcosis, is a zoonotic infection caused by the larvae of Echinococcus granulosus. It is prevalent in many parts of the world, particularly in regions where livestock farming is common. Endemic areas include the Mediterranean region, the Middle East, South America, Eastern Europe, and parts of Asia and Africa. Among these regions, Morocco is notably affected due to its agricultural practices and the close interactions between humans and livestock, which facilitate the life cycle of the parasite [1].

The life cycle of Echinococcus granulosus involves definitive hosts (dogs and other canines) and intermediate hosts (sheep, goats, and cattle), with transmission occurring primarily in rural farming areas [2]. The most frequent sites of hydatid cyst involvement are the liver (50-70% of cases) and the lungs (20-30% of cases) due to the filtering role of these organs in the circulatory system [3]. However, the disease can also affect other organs and tissues, including the spleen, kidneys, heart, and even the central nervous system, although these occurrences are less common [4].

Muscular involvement in hydatid disease is rare, accounting for approximately 1-5% of all cases. Among these, gluteal muscle involvement is exceptionally rare. Our patient presented with a left gluteal hydatid cyst, highlighting the importance of considering hydatid disease even in unusual locations when evaluating cystic lesions in endemic areas like Morocco [5]. The scarcity of cases involving gluteal muscles poses diagnostic challenges and often leads to delays in treatment due to the non-specific clinical presentation [6].

Case Presentation

A 30-year-old female patient, residing in a rural area, presented to the emergency department with a two-month history of left gluteal pain that had progressively worsened, causing difficulty in walking over the past week, along with nausea and a fever of 39°C. She had no significant medical history. Physical examination revealed a large, red, and warm swelling in the lower outer quadrant of the left buttock, with no other significant findings (Figure 1).

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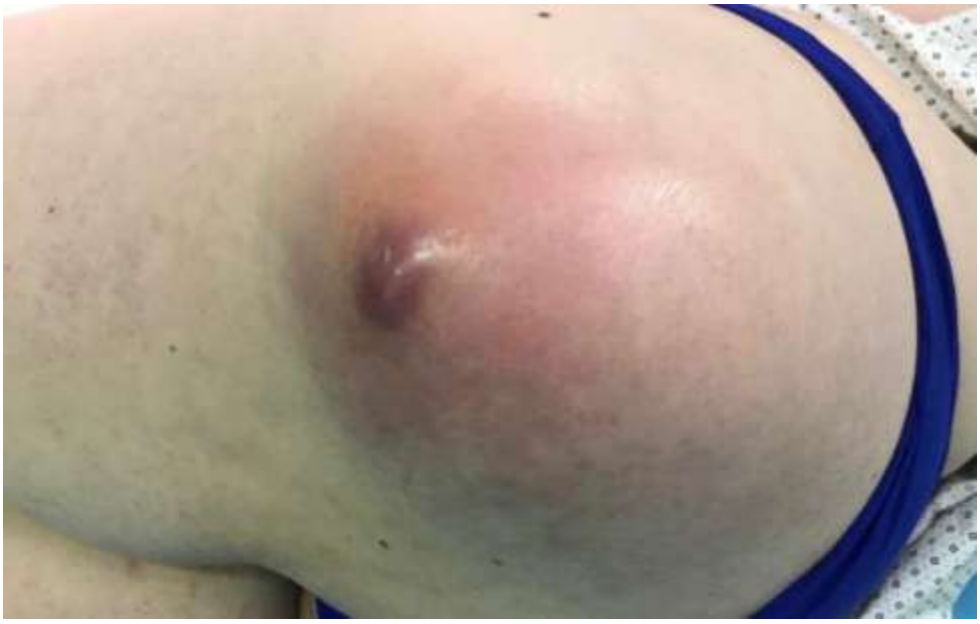
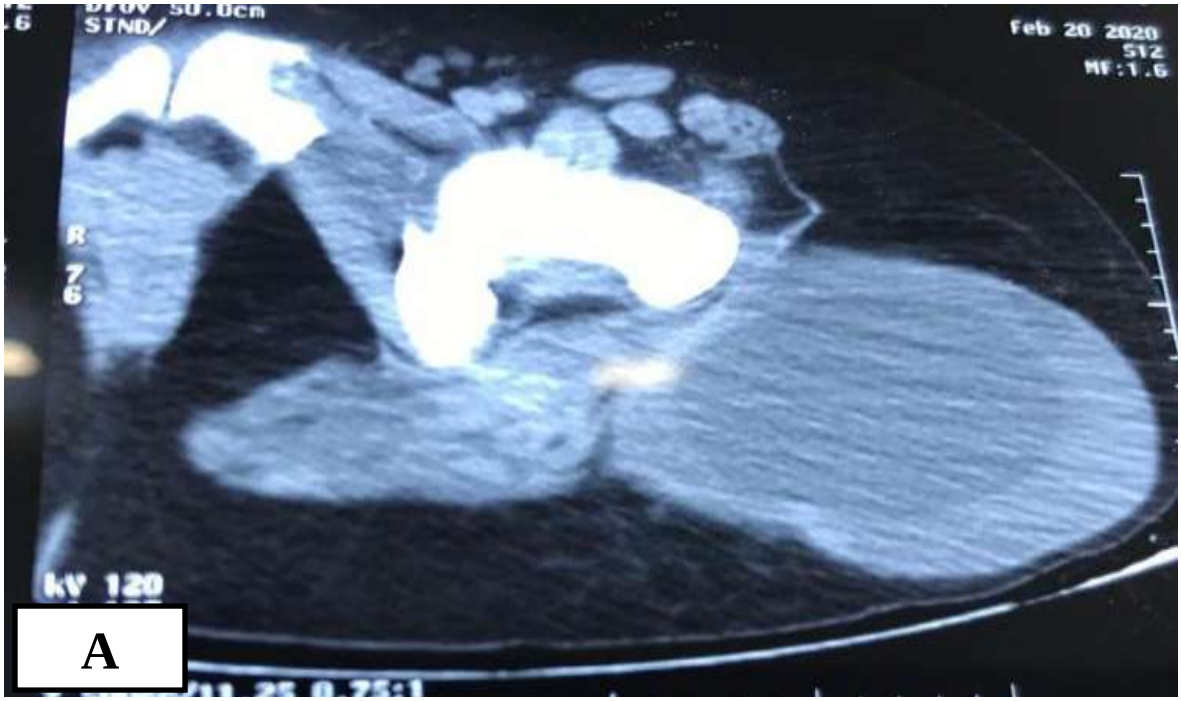


Figure 1:- Clinical aspect of the swelling.

Laboratory tests showed elevated inflammatory markers, including a C-reactive protein (CRP) level of 156 mg/L and leukocytosis of 14,000/mm³ with an eosinophil count of 4,000/mm³. A computed tomography (CT) scan of the pelvis revealed a well-defined two cystic lesions in the left gluteal muscle measuring successively 140 x 108 mm and 43*32mm, suggestive of a hydatid cyst (Figure 2).



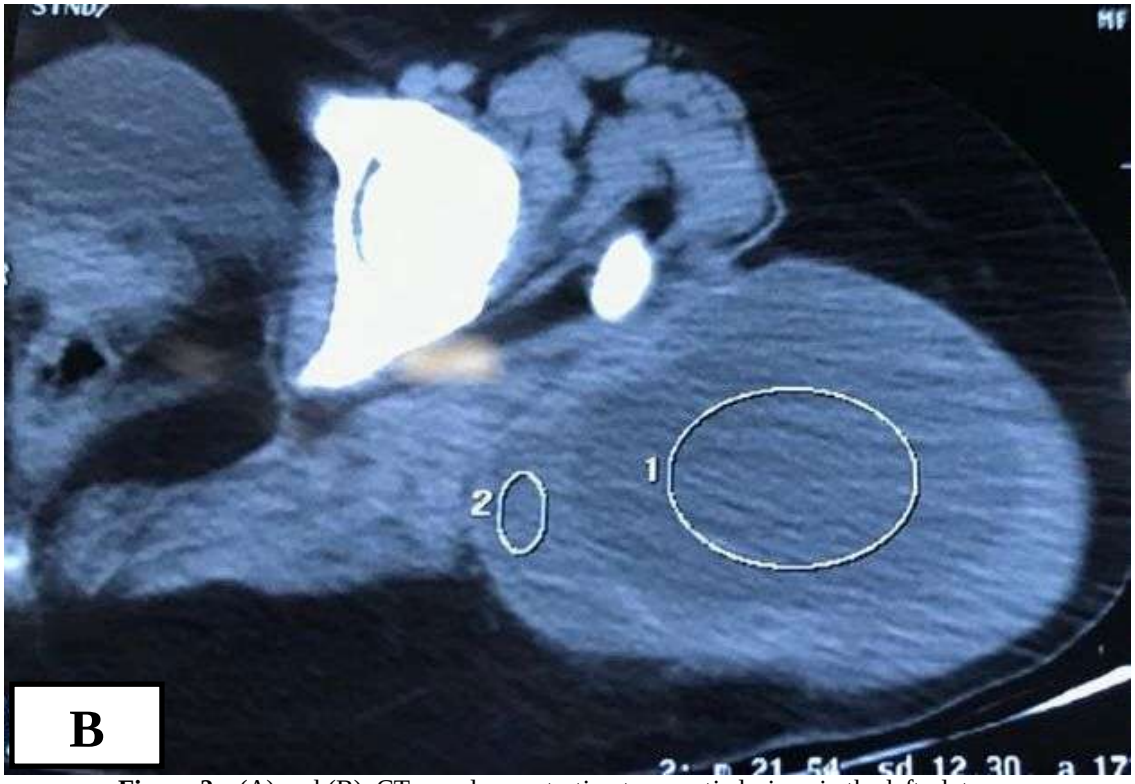


Figure 2:- (A) and (B) CT scandemonstrating two cystic lesions in the left gluteus.

The patient underwent surgery under spinal anesthesia, where gauze soaked in hydrogen peroxide was used to prevent contamination. A complete excision of the cyst was performed without intraoperative rupture. The postoperative course was uneventful, with good clinical and laboratory recovery. Histopathological examination confirmed the diagnosis of a hydatid cyst, showing the presence of scolices and laminated membrane structures (Figure 3).

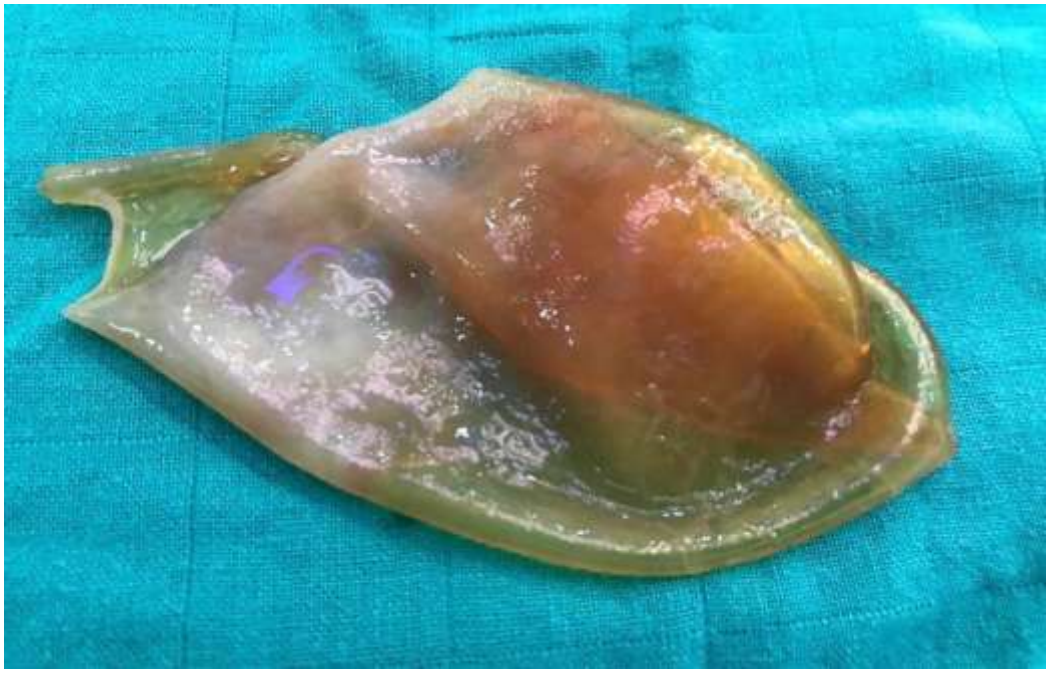


Figure 3:- Postoperative specimen of the hydatid cyst.

Due to the urgent nature of the case, the patient was not administered preoperative antiparasitic therapy. Postoperatively, she was treated with albendazole 400 mg twice daily for six months, with monthly monitoring of liver enzymes. Follow-up imaging over 12 months showed no signs of recurrence.

Discussion:-

Gluteal hydatid cysts are an extremely rare manifestation of hydatid disease. The literature indicates that muscular involvement represents a minor fraction of all hydatid cases, with the most common sites being the liver and lungs [6,7]. In the review of similar cases, it was found that muscular hydatid cysts are often misdiagnosed due to their non-specific symptoms and the rarity of this presentation [8].

Diagnostic Methods

Imaging is crucial for diagnosis. Ultrasound, CT, and MRI scans can help define the lesion's size and structure. CT scans, in particular, are useful for visualizing cyst walls and differentiating hydatid cysts from other masses[5]. Serological tests such as ELISA and indirect hemagglutination can aid in diagnosis by detecting antibodies against Echinococcus granulosus, though they may be less sensitive in cases of muscular involvement.

Surgical Treatment

Surgical excision remains the mainstay of treatment for hydatid cysts in unusual locations like the gluteal region. The technique involves careful removal of the cyst without rupture to prevent secondary dissemination and recurrence [9,10]. In our case, meticulous surgical intervention ensured that the cyst was removed intact, consistent with best practices reported in other studies [11].

Postoperative Management

Postoperative albendazole therapy is commonly recommended to reduce the risk of recurrence, especially in cases where the cyst's integrity may have been compromised or if multiple cysts are present [12]. This approach aligns with the strategies outlined in other studies where combination therapy has been shown to improve outcomes and reduce the likelihood of recurrence [13,14].

Conclusion:-

This study successfully highlights the rare presentation of a gluteal hydatid cyst and demonstrates the importance of considering hydatid disease in the differential diagnosis of cystic lesions in endemic areas. Early diagnosis, careful surgical intervention, and appropriate antiparasitic treatment were key to achieving a favorable outcome in our patient. This case underscores the need for awareness of atypical presentations of hydatid disease to prevent diagnostic delays and complications.

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