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(CASE REPORT)

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Hydatid cyst of the postero-internal side of right leg: A case report

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Abstract

The primitive and isolated subcutaneous localization of the hydatid cyst is exceptional, even in countries where hydatid disease is endemic.

We report the case of a young patient with a subcutaneous hydatid cyst without associated visceral damage.

Keywords: Hydatid cyst; Right leg; Anatomopathologi; Case report

1. Introduction

Hydatid disease is a parasitic infection caused by Echinococcusgranulosus.

The life cycle of this parasite is well known. The liver is the most frequently affected organ (75%), followed by through the lung (15%). The primary localization in the tissue beneathcutaneous is extremely rare, and its incidence is unknown.

We present an exceptional case of isolated subcutaneous hydatid cyst without associated visceral involvement in a young 57-year-old patient.

2. Patient and observation

MM is a 57-year-old patient with no previous history.particular pathological conditions which have presented for 06 months a nodular lesion 06 cm in diameter, fluid-like, mobile in the deep plane,painful on palpation with bluish skin on the side(Figure 1).

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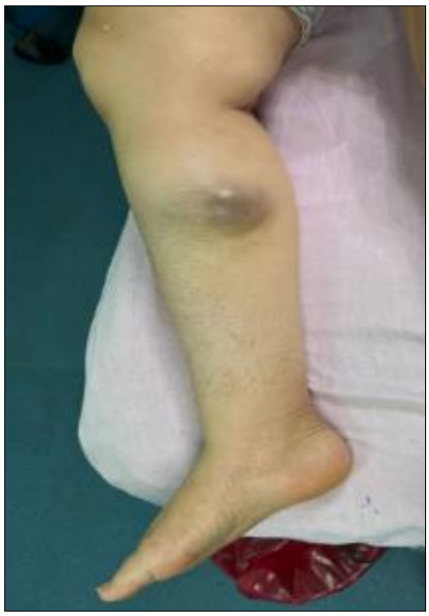

Figure 1 Clinical photo of right leg.

An ultrasound and MRI are done with an appearance of two subcutaneous cysts (Figure 2).

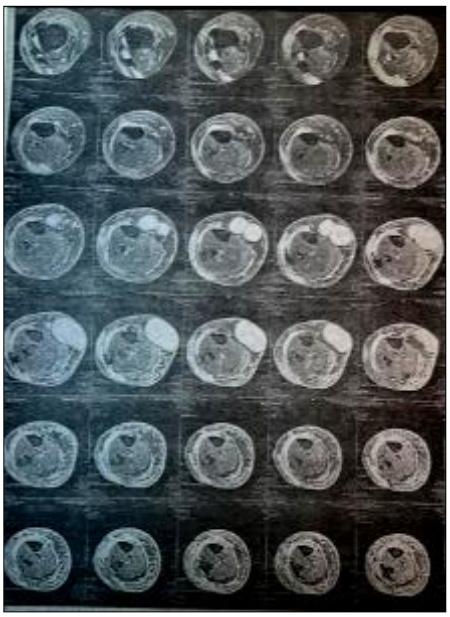

Figure 2 Right leg MRI.

The biological assessment did not haverevealed hyper eosinophilia, The sedimentation rate was 18 mm in the first hour.

Surgical exploration had revealeda translucent cystic membrane with a thin wall of 06 cm linked to a fatty tissue, very adherent to the skin (Figure 3).

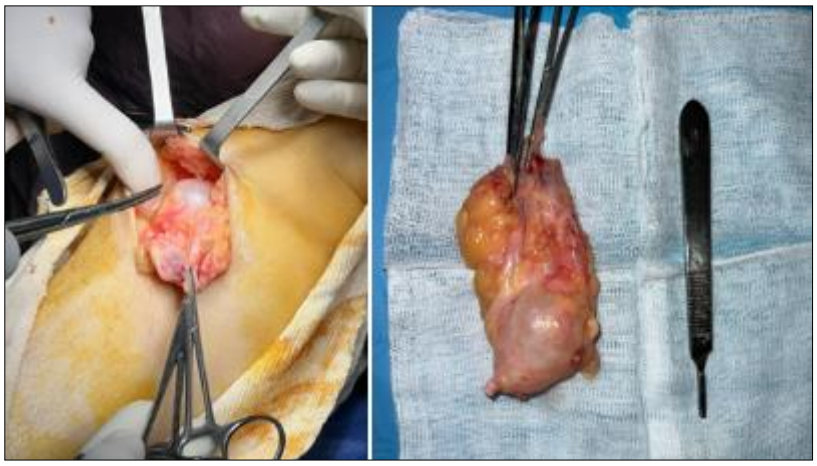

Figure 3 Peroperative image of hydatic cyst.

Histological examination showed a membrane laminated anhist made of concentric layers weakly eosinophilic with a proligerous membrane without abnormality of the fatty tissue in favor of a subcutaneous hydatid cyst .

Hydatid serology was negative.

Chest x-ray and abdominal ultrasound were normal. The patient was put on antiparasitic treatment Albendazole 400mg six daysout of seven with rigorous hepatic biological monitoring for 06 months without recurrence or other visceral locations.

3. Discussion

The mechanism of subcutaneous localization is unclear [1]. The eggs of the ingested parasite penetrate the intestinal wall, join the portal system and reach the liver where most of them are supported in the hepatic sinuses [1]. Some eggs can pass through the liver (first filter) and reach the lung (second filter) and systemic circulation causing hydatid disease in other organs [2]. A Possible diffusion through lymphatic channels has also been reported.

This mechanism explains the location sexceptional like our case [3]. The propagation from a Neighborhood outbreaks constitute another mechanism for the spread of hydatid disease [4]. In a large Greek series, the frequency of extrahepatic and extrapulmonary hydatidosis was 9% [3]. However, in other series, theFrequency of subcutaneous localization is generally associated with involvement of other solid organs and has been estimated at approximately 2% [5].

The primary and isolated subcutaneous location of the hydatid cyst is extremely rare, even in geographical areas where hydatid disease is common [2,7]. Usually it presents as a non-inflammatory, painless mass without any deterioration in the patient's general condition.

However, if the cyst is infected or cracked, the clinical picture may simulate an abscess or lead to anaphylactic shock. Ultrasound, CT and MRI are useful for diagnosis and the search for other locations [7].

Serology is useful to confirm the diagnosis. It is rarely positive for extrahepatic and extrapulmonary cysts (25%) [3].

The best therapeutic option is surgical excision of the intact cyst to avoid local recurrence and the risk of anaphylactic shock [5]. If excision is impossible, the contents of the cyst can be aspirated intraoperatively or under ultrasound guidance then irrigated with a scolicidal solution : 20% concentrated saline solution , 3% hydrogen peroxide, associated 1.5% cetrimide with chlorhexidine at 0.15% (10% Savlon®), ethyl alcohol at 95%, polyvinylpyrrolidone iodine at10% (Betadine®) [6]. Medical treatment is based on the use of albendazole [1,3].

4. Conclusion

Hydatid cyst is one of the diagnoses to be considered in the face of any subcutaneous cystic lesion, particularly in endemic regions.

The search for other visceral locations is essential. The best treatment is total excision of the cyst with an intact wall. Antiparasitic treatment with albendazole should be initiated in the event of a ruptured cyst or surgery impossible.

Compliance with ethical standards

Acknowledgments

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Disclosure of conflict of interest

The authors declare no conflict of interest regarding the publication of this article.

Statement of informed consent

Informed consent was obtained from the patient included in the study. The patient information was be kept confidential during and after study period.

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