

Case Report

Muscular hydatidosis about an exceptional form

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Received: 24 October 2023

Revised: 01 December 2023

Accepted: 04 December 2023

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ABSTRACT

The preferred localizations of human echinococcosis are the liver and the lungs, of which they represent 85% of cases. They generally pose few diagnostic problems, because they are familiar and frequent. The involvement of the soft parts is exceptional, it represents less than 1% of the localizations of human echinococcosis, frequently constituting surprises of anatomical-pathological or radiological examination. We report the rare observation of a hydatid cyst of the adductors of the thigh and discuss the contribution of magnetic resonance imaging (MRI) in this context and the therapeutic modalities. Certainly; it is a rare case but we must think about this diagnosis, especially in subjects from a country with high endemic, and ask for the necessary explorations in order to make the diagnosis in time and avoid therapeutic errors.

Keywords: Muscle hydatidosis, Echinococcus granulosus, Adductor muscles

INTRODUCTION

The preferred locations for human echinococcosis are the liver and the lungs, of which they represent 85% of cases.¹ They generally pose few diagnostic problems, because they are familiar and frequent.²

The involvement of the soft parts is exceptional, it represents less than 1% of the localizations of human echinococcosis, frequently constituting surprises of anatomical-pathological or radiological examination.³

We report the rare observation of a hydatid cyst of the adductors of the thigh and discuss the contribution of magnetic resonance imaging (MRI) in this context.

CASE REPORT

A 60-year-old patient of rural origin, with no significant history, was hospitalized in our department for exploration of a swelling of the inner side of the left thigh that appeared gradually and insidiously. This lesion, initially

asymptomatic, caused, after 12 years of evolution, inguinal pain then of the lower left limb, not systematized.

The pain, initially mechanical and calmed by rest and painkillers, gradually became inflammatory and insomnia, leading the patient to consult.

On examination, she was afebrile and in good general condition. Palpation of the left inguinal hollow revealed a poorly limited mass, adhering to the deep plane, slightly sensitive and quivering (Figure 1).



Figure 1: Clinical appearance of the left thigh.

The sedimentation rate was normal as well as the white blood cells, and there was no hypereosinophilia. The standard X-rays of the left femur were normal. The ultrasound of the left thigh revealed two intramuscular formations, hypoechoic and encapsulated, containing vesicles, with an enhancement of the doppler signal on the periphery of the lesion. The hydatid serology came back negative.

Magnetic resonance imaging (MRI) (Figure 2), performed to better study the ratios of the mass with the neighboring vascular and nerve structures, in coronal and axial sections in weighted sequence T1 (A) and T2 (B) two low-signal tumor lesions of the inner surface of the root of the left thigh containing rounded formations. The cystic lesions took contrast after injection of gadolinium (c) with a thick wall and a heterogeneous content. These cystic formations pushed back, without invading them, the superficial femoral vessels inside and the sciatic nerve behind. The chest X-ray and abdominal-pelvic ultrasound did not show images suggestive of a hydatid cyst.

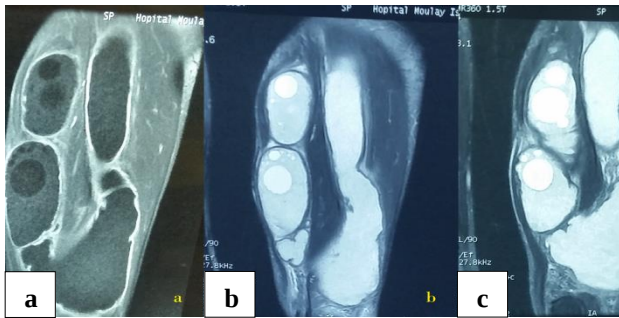


Figure 2: MRI in coronal and axial sections in weighted sequence T1 (a) and T2 (b) two low-signal tumor lesions of the inner surface of the root of the left thigh containing rounded formations. The cystic lesions took contrast after injection of gadolinium (c) with a thick wall and a heterogeneous content. These cystic formations pushed back, without invading them, the superficial femoral vessels inside and the sciatic nerve behind.

The antero-internal approach of the left thigh found two cystic formations of 30×10 cm and two other small cysts of 5×3 cm, on either side of the main lesion. These lesions were located behind the vascular axis and were buried in the mass of the adductors. In view of these findings, sterilization with H₂O₂ and a macroscopically complete resection were performed, despite the adhesion of the cystic formations to the muscle fibers. The postoperative follow-up was simple. In macroscopy, the contents of the cystic lesions were whitish, bound and multivesicular (Figure 3). The postoperative consequences were simple.

The anatomical and pathological study confirmed the diagnosis of muscular hydatidosis (Figure 4).

With a setback of 8 months, the patient is currently asymptomatic in terms of thigh pain. The clinical

examination no longer finds a palpable mass in the dressing room of the adducteurs. La postoperative hydatid serology remained negative.

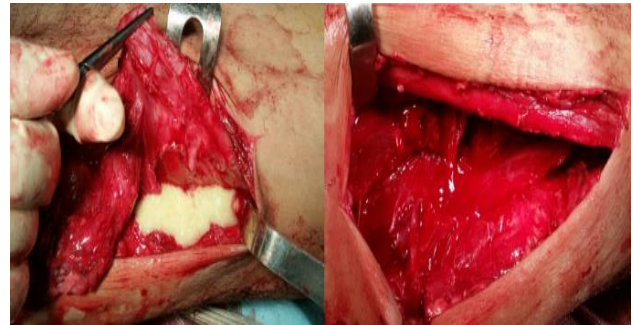


Figure 3: Intraoperative aspect.

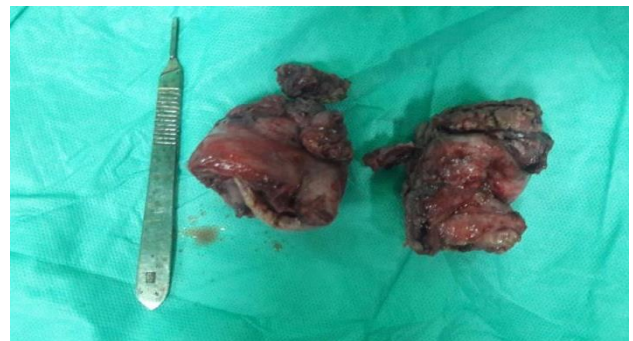


Figure 4: Muscular hydatidosis after removal.

DISCUSSION

The localization of the primary muscular hydatid cyst is rare; despite the great frequency of hydatidosis in our country, this could be explained by two mechanisms opposing the hydatid nidation at the muscular level, on the one hand, a chemical phenomenon linked to the secretion of lactic acid by the muscle and on the other hand, a mechanical phenomenon linked to the contraction of the myofibrils of a well-stressed muscle mass.^{1,2}

The clinic provides guidance elements, it is most often a recurring mass, painless, well limited and of slow evolution in a context of general condition. conservé. Au biologically, hypereosinophyly is inconstant, hydatid immunology is not very sensitive in this kind of locations.³

On the other hand, imaging is the most important component. The standard radiography makes it possible to eliminate a calcification of the cysts or a bone involvement, but it is the ultrasound which constitutes the key examination of the diagnostic orientation, it makes it possible to specify the liquid nature of the swelling with sometimes visualization of daughter vesicles. The CT scan makes it possible to specify the number of cysts, their size, their topography and their relationships with the vascular pedicles.⁴

MRI is more accurate than ultrasound and CT, thanks to its high resolution in contrast and its discrimination in the three planes of space, it allows to establish intimate relationships with nerves and vessels. However, the specificity of this examination compared to other sectional imaging techniques does not make it a first-line technique, it is only necessary when other examinations prove insufficient in the study of the complex relationships of the hydatid cyst with neighboring structures.⁵

Indeed; the removal of hydatid cysts from the soft parts sometimes poses problems.⁶ The usual absence of cleavage planes, especially when the cyst is infected, makes kystectomy difficult.^{7,8} But the adhesion to the vasculo-nervous elements can be, as in our case, particularly tight and make complete removal difficult. The protection of the surgical field by H₂O₂ compresses does not always avoid surgical contamination, especially in the case of cracking or infection of the cyst, hence a relatively frequent rate of local or remote recurrences.^{9,10}

CONCLUSION

The hydatid cyst of the soft parts is a rare, slow developing tumor with local extension. It is necessary to think about this diagnosis, especially in subjects originating from a high endemic country, and ask for the necessary explorations in order to make the diagnosis on time and to avoid therapeutic errors.

MRI is certainly more accurate than other imaging methods in determining morphology, topography and relationships with neighboring structures. But the absence of diagnostic specificity makes MRI a technique used for the preoperative assessment.

Funding: No funding sources

Conflict of interest: None declared

Ethical approval: Not required

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Cite this article as: Bousbaa H, Zejjari H, Cherrad T. Muscular hydatidosis about an exceptional form. *Int J Res Orthop* 2024;10:808-10.