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The Cardiac Hydatid Cyst: A Case Report

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Abstract **Case Report**

Hydatid cyst commonly affects liver and lung. Cardiac hydatid cyst is an extremely rare disease, due to the development in the heart of the larval form of Taenia Echinococcus granulosus. The diagnosis of this location is difficult due to the absence of specific clinical signs, and its prognosis is often guarded due to the risk of rupture and hematogenous dissemination. Clinical polymorphism, latency and severity of complications are the essential characteristics. We report the case of a child who has this exceptional location of hydatic cyst. The aim of this study is to report the presentation and management of cardiac Hydatid diseases.

Keywords: Hydatid cysts, Open heart, Left ventricule; child.

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BACKGROUND

Cardiac hydatid cyst is a rare parasitic condition, due to the development in the heart of the larval form of Taenia Echinococcus granulosus.

The diagnosis of this location is difficult due to the absence of specific clinical signs, and its prognosis is often guarded due to the risk of rupture and hematogenous dissemination. Clinical polymorphism, latency and severity of complications are the essential characteristics.

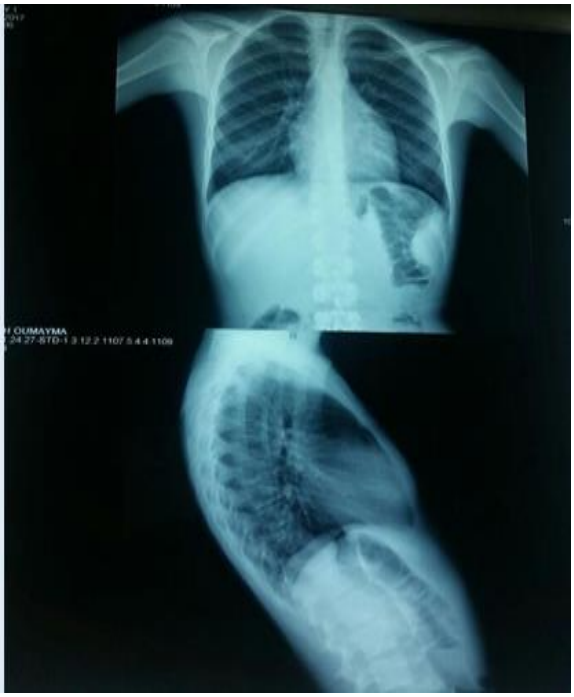
We report the case of a child who has this exceptional location of hydatic cyst.

OBSERVATION

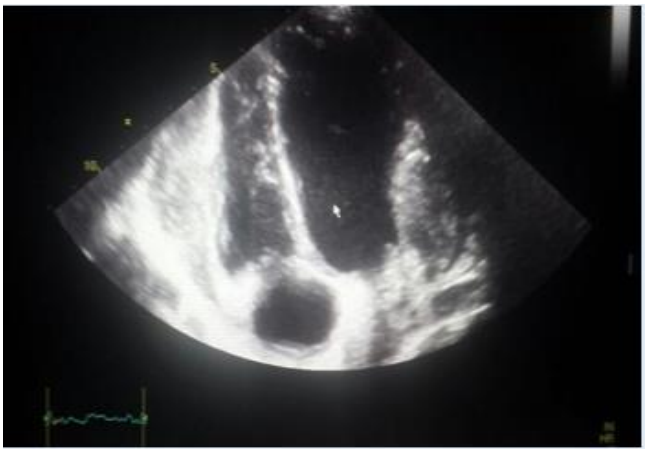
We report the case of a 12 year old male with a history of contact with dogs, who presented 4 months before his admission with chest pain with dyspnea and palpitations evolving in a context of fever and conservation of the state.

General Somatic examination on admission was unremarkable.

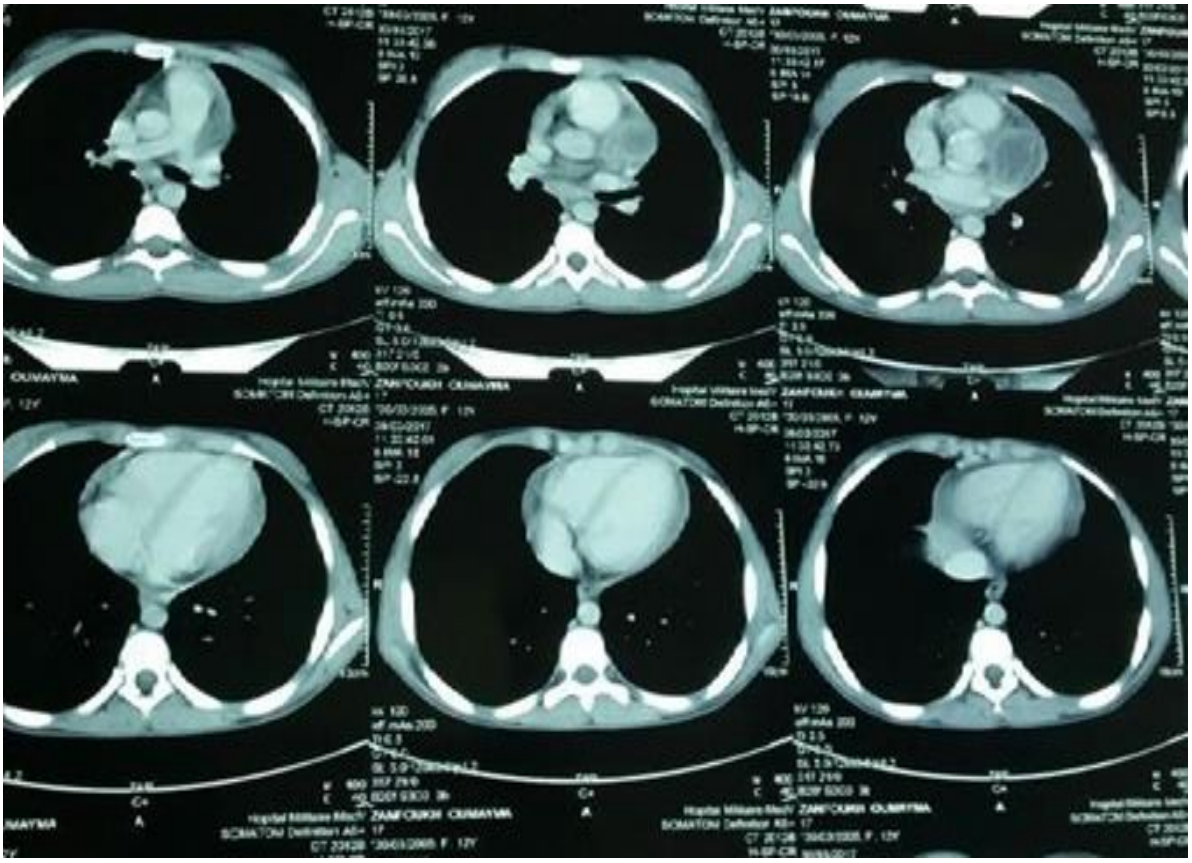
The chest X-ray showed a bulging of the middle and lower left arch, the echocardiography located a left lateroventricular intrapericardial mass with a cleavage plane between the mass and the left ventricle, the radiological assessment was completed by a cardiac MRI objectifying a hydatid cyst in the left ventricle. The biological assessment carried out had objectified a hyper eosinophilia on the blood count and a positive hydatid serology, clinical and radiological improvement.



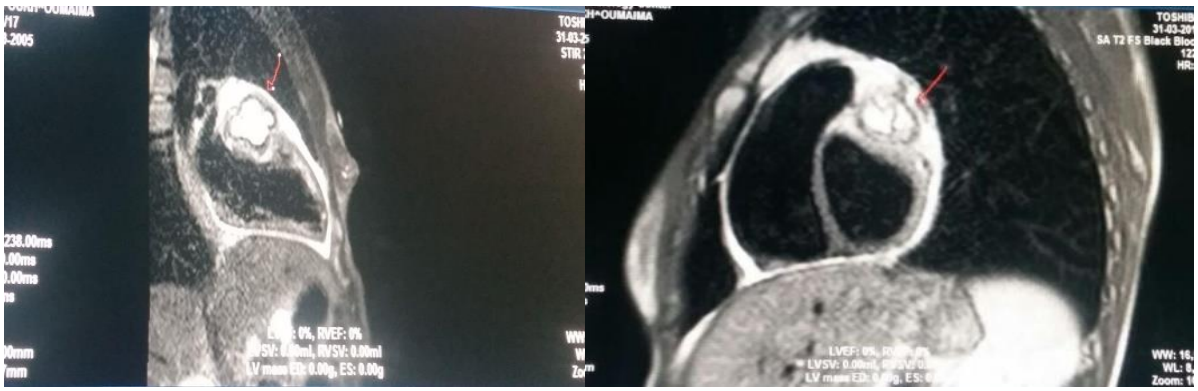
Frontal and profile chest x-ray: shows b 1



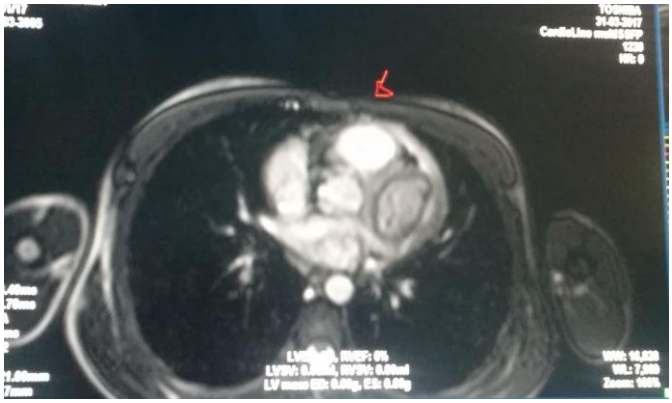
ETT: obective a left lateroventricular i 1



Chest CT: continuous fluid suggestive of cardiac hydatid cyst



(a) **(b)**



(c)

Cardiac MRI: a, b, c shows a cyst image in the left ventricule hypo-intense on T1 et hyper intense on T2 with peripheral hypo-signal related to the fibrous capsule evoking a hydatid cyst

DISCUSSION

The thoracic localizations of the hydatid cyst (KH) are dominated by the lung. The KHs of the heart and blood vessels are rare in children and represent only 0.2 to 3% of all hydatid localizations [1].

The left ventricule is the dominant location (60%), only pericardial location is less usual (7%) [1]. the hydatid cyst of the heart can be isolated (65%) or associated with other visceral damage (35%), especially hepatic or pulmonary [2].

It is localization at the level of the left ventricle in our case.

The clinical picture is variable depending on the seat in relation to the valvular orifices, conduction tissue and its volume.

Chest pain is the most commonly reported symptom [3]. However, the most frequent mode of revelation remains fortuitous discovery by chest X-ray or transthoracic ultrasound. In our study, the initial symptom was chest pain with dyspnea and palpitations.

The ECG is abnormal in 40% of cases in the form of repolarization disorder and conduction disorders. Hydatid serology is positive in 50% of cases, its negativity not eliminating the diagnosis. The TTE is the reference examination showing a uni- or multivesicular cyst, with a hypoechoic appearance surrounded by a dense hyperechoic shell.

CT or MRI can rule out other diagnoses.

MRI determines the exact relationship of the hydatid cyst with the cardiac structures, the nature of the internal and external constituents of the cyst, as well as the extension of the hydatidosis intra or extra-thoracic [4].

Surgical treatment is the reference.

Closed-heart surgery concerns uncomplicated isolated subepicardial cysts, but surgery under CEC is the attitude adopted, allowing the most complete excision possible [5].

A hydatid serology every 2 months for 2 years is justified to detect a possible recurrence. The patient was scheduled for surgical excision; the evolution was marked by a clear improvement on the clinical and radiological level.

CONCLUSION

The cardiac hydatid cyst remains a rare but serious condition given the risk of embolic, infectious and anaphylactic complications, hence the interest of early radical treatment without forgetting the interest of prevention.

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