PAMJ Clinical Medicine
Pan African Medical Journals

Case report

# Tamponade revealing hydatid cyst of the left ventricle

**Rim Ouazzane[1,&], Gaelle Minko[1], Isis Azannai[1], Marwa Abdulhakeem[1], Rachida Habbal[1]**

[1]University Hospital Ibnrochd, Casablanca, Morrocco

[&]Corresponding author: Rim Ouazzane, University Hospital Ibnrochd, Casablanca, Morrocco

Received: 19 Nov 2019 - Accepted: 27 Nov 2019 - Published: 30 Nov 2019

Domain: Cardiology

Keywords: Cardiac hydatid, tamponade, left ventricule

**Abstract**

The hydatid disease is endemic in certain areas of the world such as the Mediterranean basin. We report the observation of cardiac hydatidosis revealed by pericardial effusion. A 49 year old man, with no particular pathological antecedents, consulted for progressive dyspnea since 3 months. In cardiac echocardiography, we noticed the presence of an abundant pericardial effusion in pre-tamponade. A pericardial puncture indicated urgently was performed. Thoracoabdominal CT scan showed a multivesicular hydatious cyst of type 3 interesting the superior part of the left ventricle. The patient was put on medical treatment (Albendazole®) and referred to surgery for management.

**Case report | Volume 1, Article 35, 30 Nov 2019 | 10.11604/pamj-cm.2019.1.35.21032**

Available online at: https://www.clinical-medicine.panafrican-med-journal.com/content/article/1/35/full

## Introduction

The hydatid disease or hydatid cyst results from the development of the hydatid larvae of a *taenia echinococcus or echinococcus granulosus*. It is endemic in certain areas of the world such as the Mediterranean basin. We report the observation of cardiac hydatidosis revealed by pericardial effusion.

## Patient and observation

A 49 year old man, with no particular pathological antecedents, consulted for progressive dyspnea since 3 months. In physical examination, blood pressure was 100/60 mmHg, respiratory rate 24/min and pulse rate 98/min. Cardiovascular examination showed Muffling of heart sounds with No signs of heart failure. The rest of the clinical examination was normal. The electrocardiogram showed a right bundle of branches Chest X-ray showed a Cardiomegaly. (Figure 1) In cardiac echocardiography, we noticed the presence of an abundant pericardial effusion in pre-tamponade. A pericardial puncture indicated urgently was performed and had removed 1100ml of exudative yellow liquid citrin. Thoracoabdominal CT scan showed a multivesicular hydatid cyst of type 3 interesting the superior part of the left ventricle and another hydatic cyst of 8cm interesting segment 8 of the liver of type 4. There was no pulmonary involvement associated. (Figure 2) The patient was put on medical treatment (Albendazole®), and referred to surgery for management.

## Discussion

The cardiac hydatid cyst is rare, representing 0.5% to 2% of all hydatid locations. The literature review showed the predominance of the left ventricular location of the hydatid cyst (60%) which is explained by the importance of muscle mass and the rich vascularization of the left ventricle [1]. The interventricular septum is affected in 9 to 20% of cases, while the right ventricle and the right atrium (4 to 17%) and the interatrial septum (2%) [2]. The circumstances of discovery are numerous, the symptomatology varies according to the evolutionary stage of the cyst and its seat. Complications are mainly represented by pulmonary embolism, systemic, cerebral, valvular obstruction, atrioventricular block or rupture in the pericardium [3]. Echocardiography remains the key examination for the diagnosis of cardiac hydatid disease. CT and MRI allow more accurate topographic analysis and study of cyst ratios. The curative treatment of cardiac hydatidosis is exclusively surgical. It is systematic and must be done as early as possible to prevent the occurrence of complications.

## Conclusion

The cardiac hydatid cyst is a serious and rare pathology. The clinical pictures are variable and nonspecific. The therapeutic management is delicate and combines medical treatment to surgery.

## Competing interests

The authors declare no competing interest.

## Authors' contributions

All the authors have read and agreed to the final manuscript.

## Figures

**Figure 1**: frontal chest image showing cardiomegaly and bulging of the left lower arch

**Figure 2**: CT scan mediastinal window showing a type 3 multivesicular cyst sitting in the left ventricle

## References


1. Elkarimia, Ouldelgadiab N, Gacema H, Zouizrab Z,Boumzebrab D, Blelaabidiac B *et al*. Tamponnade révélant un kyste hydatique intra-péricardique. Annales de Cardiologie et d´Angéiologie. 2014;63:267 - 270. **Google Scholar**

2. Mrad DK, Tlili K, Ly M, Romdhani N, Bakir D, Gharbi H *et al*. Profil radioclinique du kyste hydatique cardiopéricardique: à propos de 17 cas. Ann Cardiol Angeiol (Paris). 2000 Oct;49(7):414-22.

3. Elhattaoui M, Charei N, Bennis A, Tahiri A, Chraibi N, Haddani J *et al*. Cardiac hydatid cysts: report of 10 cases. Arch Mal Coeur Vaiss. 2006 Jan;99(1):19-25. **PubMed** | **Google Scholar**


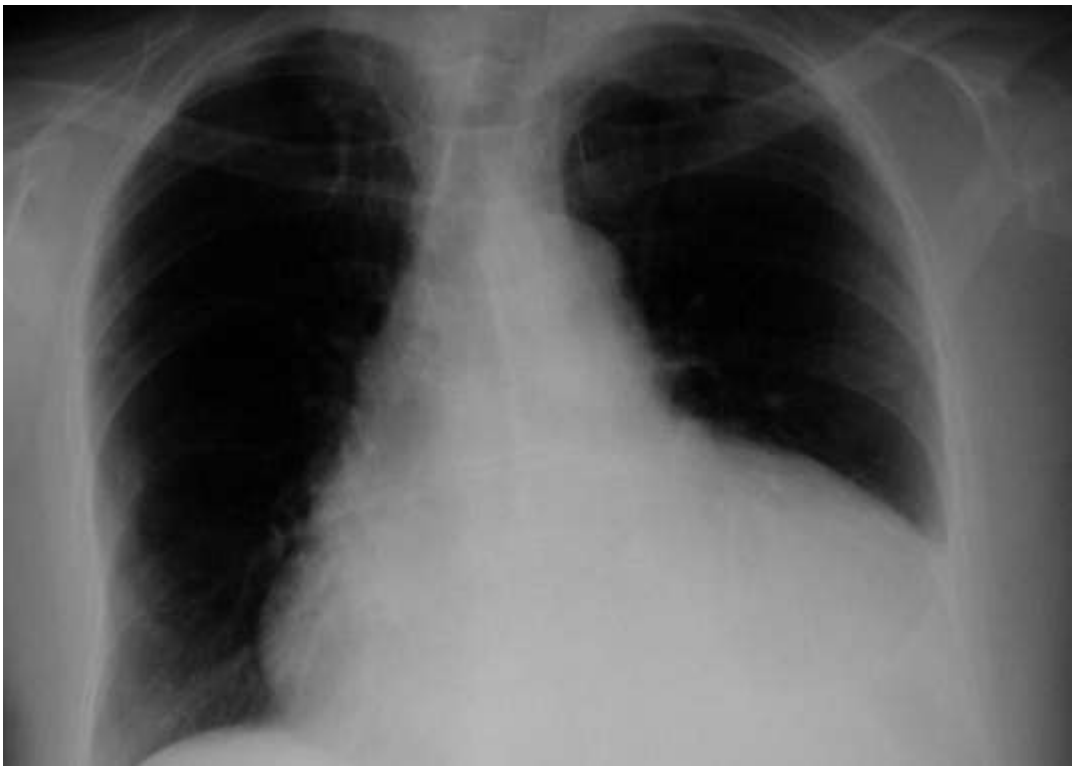

**Figure 1**: frontal chest image showing cardiomegaly and bulging of the left lower arch

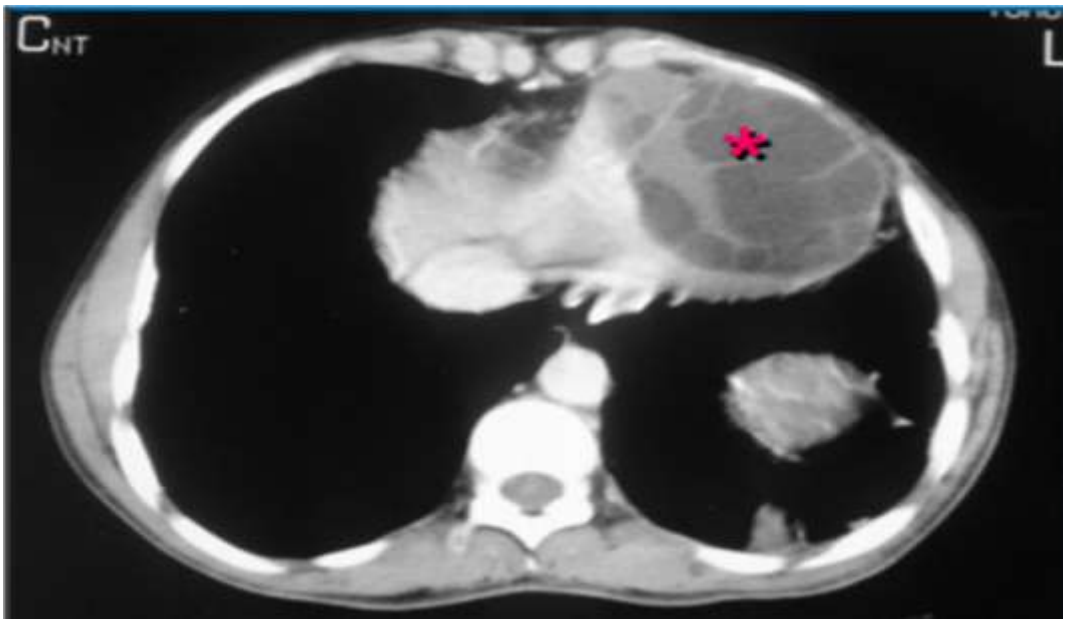


**Figure 2**: CT scan mediastinal window showing a type 3 multivesicular cyst sitting in the left ventricle