

# **Surgery management of cardiac hydatid cysts: an experience of 10 years: two algerians cardiac surgery centers**

*Mohammed Amin Serradj*

*Belorussian state medical university, Minsk*

*Tutor(s) – Pr. M.Atbi, Dr. H.Tatem, Belorussian state medical university, Minsk*

## **Introduction**

The hydatid cyst remains a major public health problem in the Mediterranean region, particularly in ALGERIA. The hepatic localization is the most frequent followed by the lung; however the cardiac hydatid cyst remains very rare representing only 0.5 to 2% of all hydatid localizations.. It was described at the first time by GRIENSINGER in 1846. The first surgical treatment without extracorporeal circulation (ECC) was performed by LONG in 1932. The first surgery under cardiopulmonary bypass was performed in 1961.

## **Aim of study**

We report our experience on the surgery management of cardiac hydatid cysts for a period extending over 10 years in endemic country (ALGERIA), in order to analyze their epidemiological, diagnostic and therapeutic aspects. At our knowledge no similar study was reported in the literature.

## **Materials and methods**

Retrospective study from January 2007 to December 2017, 23 cases of cardiac hydatid cysts, all localizations' combined that were operated in two Algerian cardiac surgery centers. The average age was 25.17 years. The sex ratio was at = 1.09. The majority of these patients lived in rural areas (81%). We note the predominance of the left ventricular localization of the cardiac hydatid cyst in 56.52% .The symptomatology was dominated by dyspnea and chest pain in 56.52% . Serology was positive in 56.52%.The Echocardiography was the key of diagnostic in the majority of cases, The CT scan and thoracic MRI were performed in rare cases. The surgical approach was in the majority of cases a vertical medial sternotomy with cardiopulmonary bypass in 82.60% .

## **Results**

The postoperative course was favorable in the majority of cases. There was only one death in the immediate post operative period with a mortality rate of 4.34%. The average length of postoperative stay was 11 days. All patients were treated with ALBENDAZOLE at a dose of 250 mg daily for six months. All patients were followed for a period of 11 months (+/- 4.3 months) during this period, at least one echocardiogram per / 06 months was performed. No recurrence noted until now Our results found confirm the data of the literature the predominance of the left ventricular location of the hydatid cyst of the heart (60%).

## **Conclusions**

The cardiac hydatid cyst is rare but it's fraught with potentially serious complications. The left ventricular localization is the most common 60%. Only the surgical treatment is curative giving better chances of healing. Cardiopulmonary bypass starting with clamping of the aorta and the pulmonary artery is recommended in any suspicion of a left or right intracavitary localization to prevent the migration of hydatid material in systemic or pulmonary circulations.