

Pediatric Department Experience in the Treatment of Pulmonary Hydatid Cysts in Children

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Dear Editor-in-Chief,

Pulmonary hydatid cysts in children are a significant public health problem in Tunisia. Its impact is huge on economy with monetary loss estimate of \$763,980,979 in the USA (1). While hepatic cysts are the most common in adult pathology, the lung is the number one location for hydatid cysts in children which causes a serious problem due to lack of standardized therapeutic strategy (2). We reported our experience in diagnosis and management of pulmonary hydatid cysts in a pediatric department in southern Tunisia. This study retrospectively evaluated patients who had been diagnosed with pulmonary hydatid cysts in the department of pediatric emergency and reanimation in Hedi Chaker hospital in Sfax, Tunisia, between 2006 and 2017.

Over 11-year period, we diagnosed and managed 14 children with lung hydatid cyst. The mean age was 8 years 2 months (3 years 8 months to 13 years); 4 were females and 10 were males and 92.3% were from rural areas. Chief complaints were cough pain in the thorax and dyspnea. Conventional X-ray made for all children revealed a unique cyst in 13 cases and multiple unilateral cysts in one. The right lung was mostly affected. Ultrasonography was performed for all patients in order to detect another location revealed hepatic cysts in 5 cases and one splenic hydatid cyst. Thirteen children underwent a surgical treatment by thoracotomy approach. Postoperative course was uneventful. Recurrence after operation was seen in one case. Albendazole was prescribed in 8 patents. One patient developed aspergilloma with good response for medical treatment. The follow-up mean was 4 years. Hydatid cyst is caused by *Taenia Echinococcus* and is prevalent in sheep raising areas such as Tunisia (3). It remains a serious public health problem due to its complications that occur both in pre and postoperative course (4). The chest radiography is the first diagnostic method for lung cyst that allows to suspect and sometimes to confirm the pulmonary cyst (1, 3). In all our patients chest radiography allowed to suspect the diagnosis and CT-scan was the key to confirm it and to provide a better description of the density and the localization. Surgery is the main treatment of pulmonary hydatid cysts of children (4). Medical therapy was not applied routinely, but only for cases with multiple lung plus liver hydatid cysts, to prevent the possibility of a relapse (5). In conclusion pulmonary hydatid cyst is a serious public health problem with serious financial burden in endemic areas. Diagnosis is radiologic and treatment is surgical with a moderate place to medical treatment.

Key Words: Children, Hydatid Cyst, Pulmonary, Tunisia.

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