

**Clinical Image**

# Bilateral Pulmonary Hydatid Cyst in Eight Years Old Girl who Underwent One Stage Operation with Folly Catheter for Blockage of Left Main Bronchus for Prevention of Aspiration

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Hydatid disease is a serious health problem in some countries like Iran where it is endemic. Although it may involve any organ, it most often affects the liver and the lungs. Bilateral pulmonary hydatidosis accounts for 4% to 26.7% in of all cases. Medical management with oral albendazole has been used, and it is the preferred treatment option in children but in complicated cysts it not effective. Pulmonary hydatidosis are bilaterally accounts for 4% to 26.7% of all cases. The most frequent complication of pulmonary hydatid disease is the rupture of the cyst into tracheobronchial tree. In some reports, a single-stage operation for pulmonary and liver hydatid cysts was found to be a safe procedure with low morbidity and mortality. A previously healthy 8-year-girl from remote region north of Iran without any previous history of lung or liver disease presented with complaints of right and left side chest pain, productive cough and a low grade fever for the past one month. Upon physical examination, her vital signs were normal. However, her oxygen saturation rate reduced to 96% in room air. Chest and abdominal examinations were normal. Laboratory investigations showed eosinophilia (15%) and anti cestod antibody was positive. Chest X-ray showed a well-defined, smoothly outlined, oval shaped cystic lesion on the left side and on the right side a solid with air fluid level (water lily sign) (Figure 1).

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These findings were indicative of bilateral hydatid cysts of the lungs. An ultrasonography of the abdomen was normal. A computed tomography scan of the chest showed bilateral hydatidcysts right site one was ruptured and complicated with water lily sign and let side one was intact cyst and two cysts in the liver (Figure 2).

Due to the symptoms caused by these cysts, the cysts were decided to be treated surgically. The patient underwent separated bilateral antero-lateral thoracotomies and under general anesthesia with folly catheter for blockage of left main bronchouse as one lung ventilation (Figure 3). In the supine position, first we operated the left side pulmonary cyst. Intraoperatively, cysts were found to be hydatid cysts, they were first aspirated and then evacuated. Laminated membrane and bronchial opening were closed with capitonnage (Figures 4-6). Cysts in the right side were evacuated similar to those in the left side. To reduce recurrence in the postoperative period; Albendazole was given for 3 cores of 28 day with 14 day interval. Her postoperative recovery was smooth without any complications. At three month follow-up, the patient showed complete resolution of all symptoms and well expanded lungs with no residual cysts visible on the chest X-ray (Figure 7).

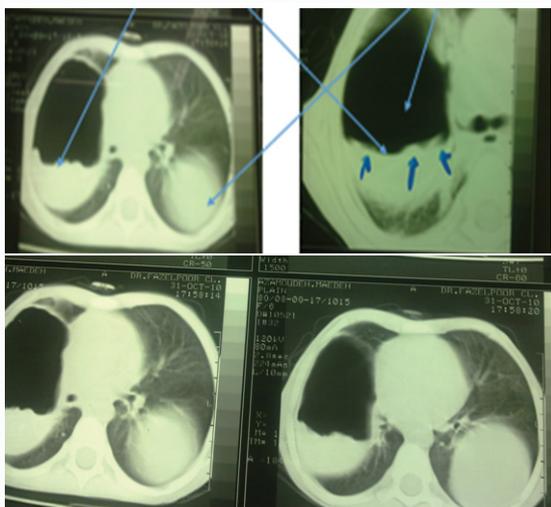
**Keywords:** Hdatidcyst; One lung ventilation; Capitonnage; Children hydatid cyst

**Ethic**

The approval was obtained from deputy of Inflammatory Lung Diseases Research Center, Department of Internal Medicine, Razi Hospital, School of Medicine, Guilan University of Medical sciences.



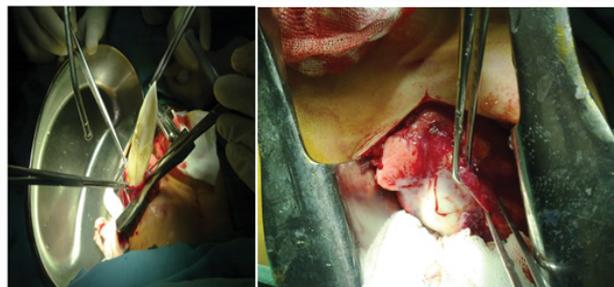
**Figure 1:** Show CXR of patient with left lung intact cyst and right side with ruptured cyst.



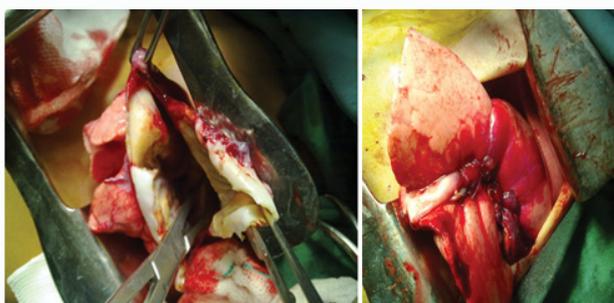
**Figure 2:** Show CT-scan of patient with left side intact cyst and right side ruptured cyst with water lily sign.



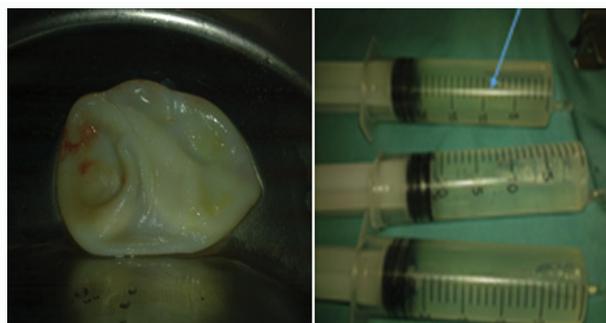
**Figure 3:** Show bilateral anterolateral thoracotomy and foley catheter for blockage of main left bronchus.



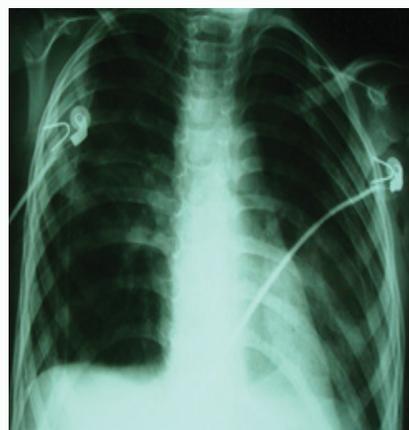
**Figure 4:** Laminated membrane and intact cyst of left lung.



**Figure 5:** Show remnant cavity after evacuation and cap tonnage.



**Figure 6:** Show laminated membrane after evacuation and aspirated fluid of cyst.



**Figure 7:** Show CXR three month of operation.