



## PULMONARY HYDATID CYST MIMIC NECROTIC CONSOLIDATION - A CASE REPORT

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**ABSTRACT** Hydatid disease is a parasitic infection caused by *Echinococcus granulosus*. It most commonly affects the liver, followed by the lungs. A 28-year-old female patient presented with right sided chest pain, cough, hemoptysis, fever, anorexia, weight loss and abdominal pain. Chest Xray showed opacity in right lower lobe. CT thorax showed large well defined non enhancing lesions in basal segment of right lower lobe, suggestive of necrotic consolidation. For on-going hemoptysis and non-resolving opacity in lungs, Surgery was planned. Thoracotomy was done and intra operative findings revealed cyst, found in the right basal lung which was confirmed to be hydatid cyst on pathological examination. The prognosis of pulmonary hydatid cyst will be good if the cyst does not rupture. Early identification and surgical removal of cyst will improve the patient's symptoms. Prompt treatment with anti-helminthic drugs in perioperative phase will prevent recurrence of the disease.

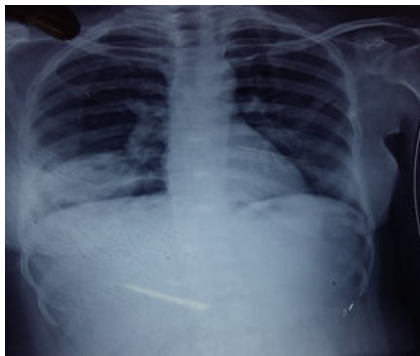
### KEYWORDS :

#### INTRODUCTION:

Hydatid disease is caused by *Echinococcus Granulosus* parasite. It most commonly affects the liver, followed by the lungs. Cough, chest pain, and hemoptysis are the common symptoms that occur due to pulmonary hydatid cyst. Symptoms are not specific and can be produced by the mass effect or cyst complication. Early identification and treatment of the condition prevents mortality.

#### Case Report:

A 28-year-old female patient presented with right sided chest pain, cough, hemoptysis, fever, anorexia, weight loss and abdominal pain. She had no past history of tuberculosis. On Respiratory system examination, it showed reduced air entry in right infra-scapular area. Investigation were normal except raised WBC count. Chest X-ray showed opacity in right lower lobe and USG abdomen showed calcified nodules in liver. Patient did not improve on medical management. CT thorax showed large well defined non enhancing lesions with hypodensity and airbronchogram within basal segment of right lower lobe, suggestive of necrotic consolidation. Ct Abdomen showed non enhancing hypodense lesion with peripheral calcification in second segment of liver, representing calcified Hydatid cyst. For on-going hemoptysis and non-resolving opacity in lungs, surgery was planned. Thoracotomy was done and intra operative findings revealed cyst, found in the right basal lung which was confirmed to be hydatid cyst on pathological examination.



**Figure 1:-** Chest X-ray showing a dense opacity involving right lower lobe.



**Figure 2:-** CT Thorax Showing Large Well Defined Non Enhancing Lesions With Hypo Density Within Basal Segment Of Right Lower Lobe.

#### DISCUSSION:

Hemoptysis has multiple causes in adults. Parasitic aetiology is very rare. Liver and lung are the most common site of hydatid cyst. Patient commonly present with cough, chest pain, hemoptysis and fever. Ct and MRI are the most superior diagnostic test. Patient may develop solitary or multiple pulmonary cyst and may also have associated cyst in liver and spleen. In this case, calcified hydatid cyst were present in liver which required no active management. Treatment options of hydatid cyst vary according to the clinical findings of the patient. Surgery is safe and effective way of the treatment, along with perioperative albendazole therapy.

#### CONCLUSION:

This case report infers that whenever a patient with hemoptysis, zoonotic infections, especially hydatid cyst of lung, should always be considered along other common cause of hemoptysis. The prognosis of pulmonary hydatid cyst will be good if the cyst does not rupture.

Early identification and surgical removal of cyst will improve the patient's symptoms. Prompt treatment with anti-helminthic drugs in perioperative phase will prevent recurrence of the disease.

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