

Intrapericardial Benign Teratoma with Unusual Presentation

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Benign teratoma, also referred as dermoid cyst, do occur in the mediastinum. However, their intrapericardial location has been reported very occasionally. This case of intrapericardial benign solid teratoma is being presented because of its rarity and its unusual presentation as a case of empyema, with features of cardiac compression and pericardial effusion.

Key words : *Benign solid teratoma, Empyema, Pericardial effusion, Intrapericardial, Thoracotomy.*

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Benign solid teratomas are common in anterior mediastinum. However, intrapericardial location of these tumours has been reported only rarely¹⁻⁴. This case is being presented for its rarity and unusual presentation.

Case Report

A 27-year-old female presented with fever and chest pain of four weeks duration. As the x-ray chest (PA view) had shown obliteration of right costophrenic angle, tube thoracostomy was carried out. This yielded about 500 ml of thick pus. Subsequent discharge in the chest tube was minimal. However, the shadow in x-ray chest still persisted (Fig. 1). Hence, the patient was referred to this institution for decortication. At that time of presentation, she had a discharging sinus from intercostal drainage site along with fever. There was no accompanying toxæmia. There was no cough or expectoration. Patient complained of feeling of dizziness in the left lateral position. A drop in blood pressure and a rise in pulse rate was also noticed in this position.

The cultures from the discharging sinus were sterile and smears were negative for acid-fast bacillus (AFB). CT scan of thorax showed large intrapericardial mass

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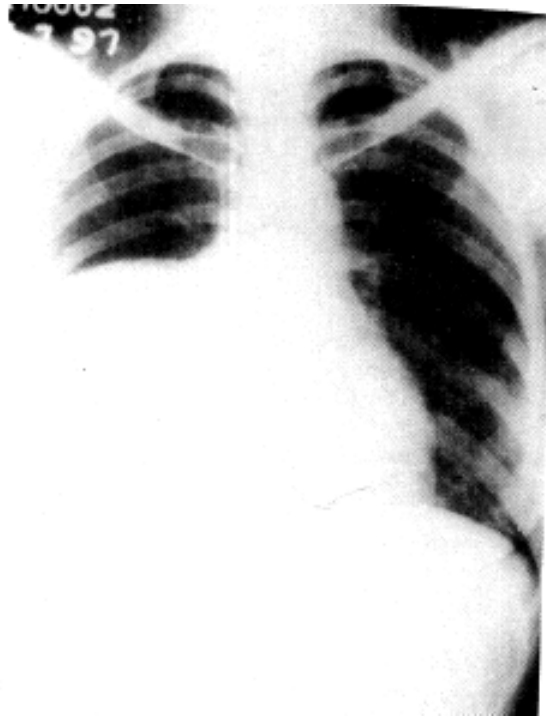


Fig. 1. Pre operative chest radiograph (posteroanterior view) at the time of presentation.

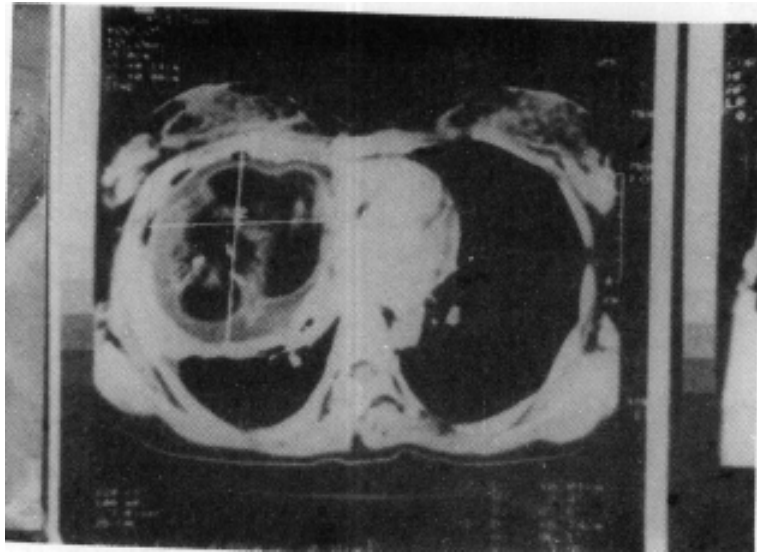


Fig. 2. CT scan of showing intrapericardial mass.

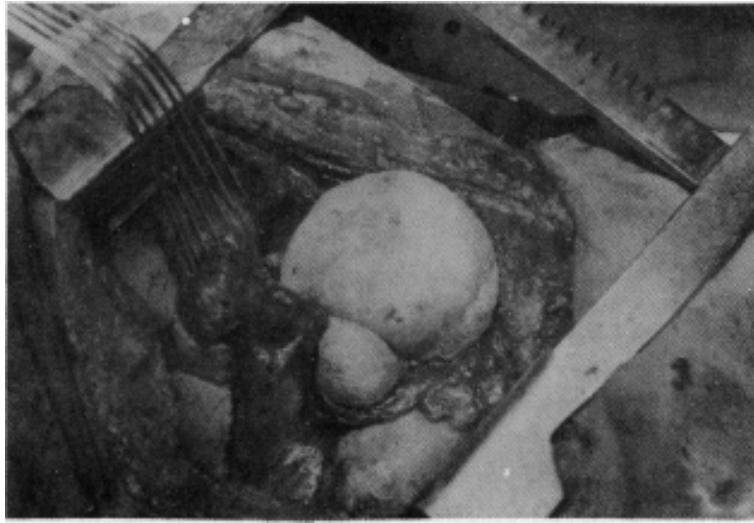


Fig. 3. Operative photograph showing the mass at the time of thoracotomy.

compressing the right sided cardiac structures (Fig. 2). Lung parenchyma was normal except for collapse and consolidation in the lower lobe. Right pleural cavity showed multiple adhesions.

Right sided thoracotomy was carried out. Moderate adhesions were lysed gently with electrocautery. A bulge was seen in the pericardium. Needle aspiration showed pus. Pericardium was opened and 800 ml of pus could be sucked out. Inside there was a mass measuring 10 x 6 x 5 cm which was removed after securing the base (Fig. 3). Chest was closed with usual drainage. Post operatively, patient was given an antibiotic regimen consisting of cefuroxime, tobramycin and metrogyl for eight days. Bacteriological culture done on the pus specimen obtained at the time of thoracotomy revealed no growth of organisms.

The patient did well in the post operative period. Postoperative course was smooth and the patient was discharged on 14th post operative day in a satisfactory state. She is doing well on a follow up of four months.

Pathology of the specimen revealed a solid mass measuring 10 x 6 x 5 cm and weighing 200 gm. Outer surface was pearly white, leathery, nodular and showed very fine small hair all over. Cut surface was predominantly solid with very soft to bony hard areas. Very small cystic areas were seen which had a pearly white lining. Cut surface showed gelatinous areas, greyish yellow areas and chalky white areas. The histopathological sections showed skin with appendages (predominantly

sebaceous glands) mature fat tissue, salivary gland tissue, bronchial epithelial cell lining and bone with fatty marrow. A diagnosis of benign teratoma (dermoid cyst) was rendered.

Discussion

Mature benign teratomas or dermoid cysts usually arise in the ovary. They can occur at other sites including the mediastinum. However, intrapericardial location as presented in this case is rare. In the pericardium, secondary neoplasia is more common than primary. Amongst the primary tumours too, teratoma is one of the rarely known tumours involving the pericardium^{5,6}. Usually benign solid teratomas present as mediastinal masses — either detected on a routine radiograph in an asymptomatic individual or because of the tumour mass. Presentation of this case as empyema and pericardial effusion was probably caused by superadded infection. The clinical features of hypotension caused by tumour induced cardiac compression in left lateral position is also unusual. The experience again underscores the significance of full evaluation of a patient of empyema before embarking upon the obvious therapy of tube thoracostomy.

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