INTRODUCTION

Benign cystic teratoma is an extragonadal germ cell tumour. The anterior mediastinum is the most common site of this tumour, although, it can also be seen in posterior mediastinum with an incidence of 3-8%. 1 About two-third of these tumours are symptomatic. 2 Infected benign cystic teratoma is a rare mediastinal tumour and due to its size, may cause pressure effects on surrounding structures, hence misdiagnosed sometimes. To highlight this aspect, this case is reported as it was initially treated as valvular heart disease and pulmonary hypertension.

CASE REPORT

A young man, aged 22 years, presented with shortness of breath, left sided chest pain and generalized weakness for three years. He was running high grade fever on and off, a plethoric face and peripheral cyanosis. Chest examination revealed decreased movements, dull percussion note and decreased air entry on left side. He was polycythemic. Initially, on the basis of echocardiography, valvular heart disease (tricuspid regurgitation) was diagnosed and was managed accordingly. Later, a chest X-ray showed a marked widening of the mediastinum. CT scan chest revealed a large cystic mass in the mediastinum compressing the chambers of the heart (Figure 1). This mass effect contributed to pulmonary arterial hypertension and right ventricular hypertrophy, which was evident on Doppler Echocardiography. In view of all these findings, left posterolateral thoracotomy was planned to excise the cystic mass. The cyst when opened was filled with one litre of pus and yellow granules, which were evacuated. The cystic mass was partially excised as a small part of the cyst wall was adherent to pericardium, aorta and pulmonary vessels. Two chest tubes were placed; apical for the air and basal for blood drainage and wound was closed. Patient had uneventful recovery. He was followed in outpatient department and at 6 months follow-up, he was healthy and symptom-free without recurrence.

DISCUSSION

Mediastinal germ cell tumour comprise 15% of all mediastinal cysts. 3 Teratoma is the second most frequent tumour of the anterior mediastinum after thymomas. 4 They are most common in young adults as in this case. Gender distribution is equal. 3 The most common symptoms are chest pain, dyspnea and cough due to compression of adjacent airways, although, patient can remain asymptomatic for years. 5 This patient, presenting with dyspnea, chest pain and generalized weakness, was referred by a cardiologist who treated him for tricuspid regurgitation and pulmonary hypertension.

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ABSTRACT

A young man aged 22 years presented with shortness of breath, left sided chest pain, mild dry cough, peripheral cyanosis, fever and generalized weakness for three years. He was diagnosed as having a large infected cystic mediastinal mass with tricuspid regurgitation and severe pulmonary hypertension. On thoracotomy, one litre of pus was aspirated and tumour was excised and sent for histopathology. Biopsy report revealed benign cystic teratoma. This case is reported to highlight the management of a huge infected benign cystic teratoma which is rarely found.

Key words: Mediastinum. Germ cell tumour. Benign cystic teratoma. Infection.
Abraham Oomman et al. reported a case of 58 years old woman with cardiac tamponade.\textsuperscript{6} Many cases are asymptomatic and incidentally diagnosed on routine chest X-ray.\textsuperscript{6} It may demonstrate a mediastinal mass, mediastinal widening, calcification and/or teeth.\textsuperscript{7} Chest X-ray of this patient showed a cystic mass bulging into the left thoracic cavity. CT scan of chest can clarify the features and define a heterogeneous mass containing soft tissue fluid, fat and calcification of the cyst wall. MRI could be even better in delineating the mass and the surgical planes.

Untreated, benign mediastinal teratoma can cause a variety of complications such as atelectasis of lung, adjacent tissue compression, infection, perforation in hemithorax and cardiac tamponade due to pericardial perforation.\textsuperscript{9} Cyst can rupture usually due to infection.\textsuperscript{9} Treatment of choice for mediastinal teratoma is surgery. It is necessary because compression will eventually affect the surrounding tissues, in addition, all benign tumours and cyst in the mediastinum can show malignant transformation with time.\textsuperscript{9} Median sternotomy is the most feasible incision since it provides excellent exposure. Complete resection is better in order to avoid recurrence. The prognosis of benign teratoma is excellent after its excision even when complete excision is not possible. Postoperative irradiation or other adjuvant measures were not indicated in any of these patients.\textsuperscript{10} The 10 years survival rate is 92.8%.\textsuperscript{11}

\begin{thebibliography}{99}
\item 7. Moeller KH, Rosado-de-Christenson MI, Templeton PA. Mediastinal mature teratoma: imaging features. \textit{Am J Roentgenol} 1997; \textit{169}:985-90.
\end{thebibliography}

\section*{REFERENCES}