

# Esophageal lung complicated by recurrent pneumonia

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## Abstract

6 month old child presented with complaints of recurrent respiratory infection, tachypnea and decreased air entry on right side . Xray chest AP view (Fig[1](#fig-cap-0001)) showed opaque right hemithorax with ipsilateral mediastinal shift and compensatory hyperinflation of left lung. Further evaluation with CECT thorax (Fig [2](#fig-cap-0002)) showed hypoplastic right lung with collapse consolidation and right sided mediastinal shift. Bifurcation of trachea was not seen with trachea continuing as left main bronchus with normal segmental division. Right bronchus appears to be arising from lower part of esophagus, precise communication was not demonstrated (Fig [3](#fig-cap-0003)). Conventional contrast (non ionic) esophagogram was performed and free flow of contrast was seen from lower third of esophagus to the right main bronchus (Fig [4](#fig-cap-0004)) confirming the diagnosis of Congenital bronchopulmonary foregut malformation (CBPFM)

## TITLE PAGE

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To the Editor

TITLE : Esophageal lung complicated by recurrent pneumonia

TEXT : 6 month old child presented with complaints of recurrent respiratory infection, tachypnea and decreased air entry on right side . Xray chest AP view (Fig1) showed opaque right hemithorax with ipsilateral mediastinal shift and compensatory hyperinflation of left lung. Further evaluation with CECT thorax (Fig 2) showed hypoplastic right lung with collapse consolidation and right sided mediastinal shift. Bifurcation of trachea was not seen with trachea continuing as left main bronchus with normal segmental division. Right bronchus appears to be arising from lower part of esophagus, precise communication was not demonstrated

(Fig 3). Conventional contrast (non ionic) esophagogram was performed and free flow of contrast was seen from lower third of esophagus to the right main bronchus (Fig 4) confirming the diagnosis of Congenital bronchopulmonary foregut malformation (CBPFM) 1. CBPFM consist of fistulous communication between respiratory and gastrointestinal tract and are more common in female child which usually present as recurrent episodes of choking while feeding, respiratory infection or failure depending upon type of malformation 2 with opacification and consolidation of involved lung is seen on imaging 3. It is classified by Srikanth et al<sup>1</sup> into 4 major types. Type 1A Total sequestered lung communicating with the foregut, associated with esophageal atresia and tracheoesophageal fistula to the distal pouch Type 1B: Sequestered anatomic lobe or segment communicating with the foregut, associated with esophageal atresia and tracheoesophageal fistula to the distal pouch, Type II: Total sequestered lung communicating with the lower esophagus; absent ipsilateral mainstem bronchus, Type III: Isolated anatomic lobe or segment communicating with the foregut and Type IV: Portion of the normal bronchial system communicating with the esophagus. Our case comes under category II in which right main bronchus is seen arising from distal esophagus. More commonly anomalous origin of right main bronchus is seen due to its proximity with esophagus<sup>4</sup>.

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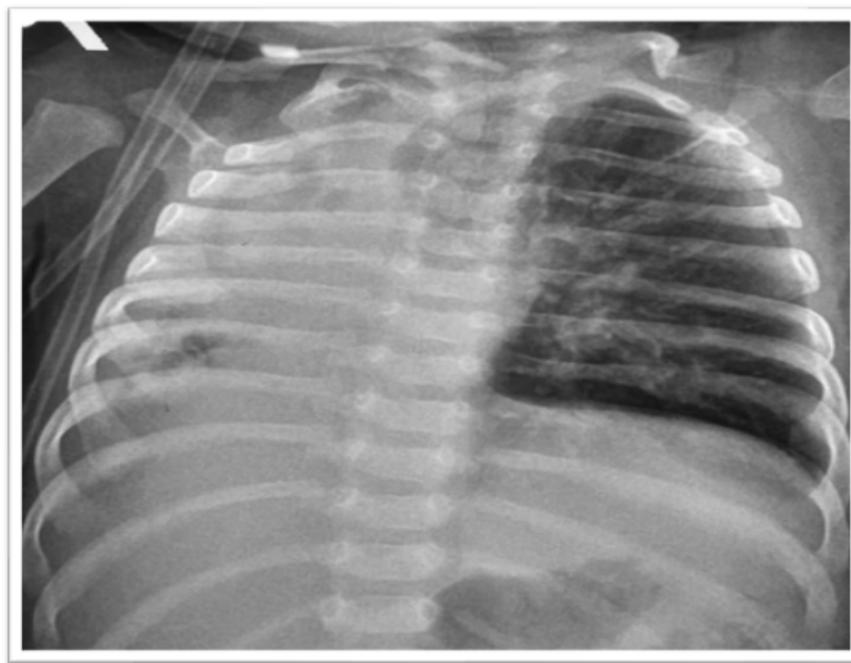


Figure 1: Chest xray AP view showing hazy right lung with ipsilateral mediastinal shift and hyperinflated left lung.

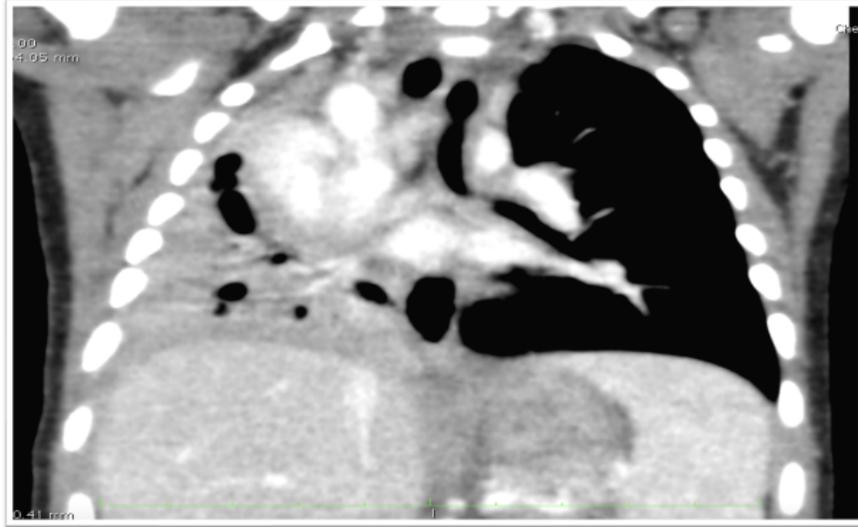


Figure 2: CECT show collapse consolidation of right lung with ipsilateral mediastinal shift.

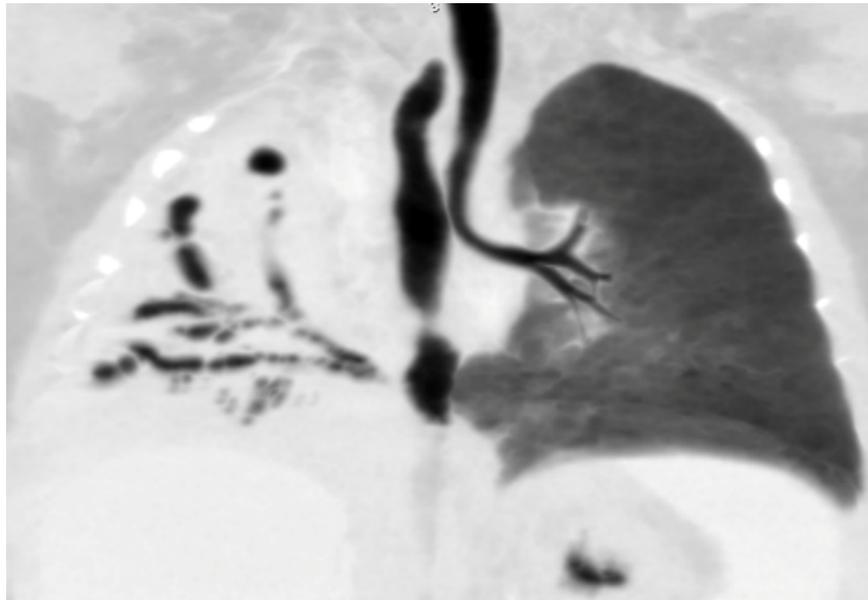


Figure 3: Minip images showing absent right main bronchus origin from trachea with normally arising left main bronchus. Right main bronchus appears to be arising from distal esophagus



Figure 4: Conventional esophagogram demonstrating communication between right main bronchus and distal esophagus.

