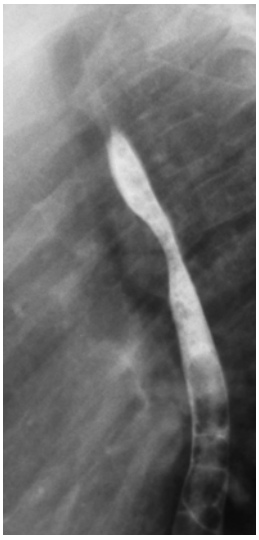
Case 15

Question page :

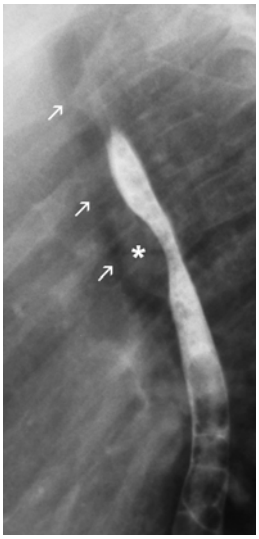
A 2 years old girl presented with recurrent pneumonia. Physical examination revealed wheezing and secretory sound from both lungs.



"Figure 10a"

The imaging is lateral view of esophagogram.
What is the diagnosis?

Answer page :



"Figure 10a label"

There is soft tissue density lesion between esophagus and trachea (arrows), The lesion causes indentation on posterior wall of trachea and anterior wall of the esophagus.

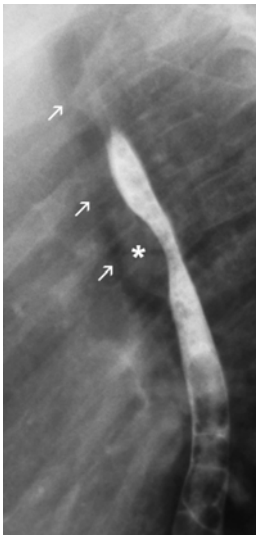


Fig 10a label

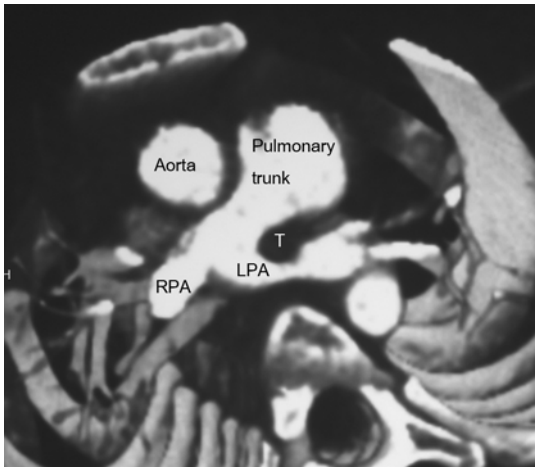


Fig10b label

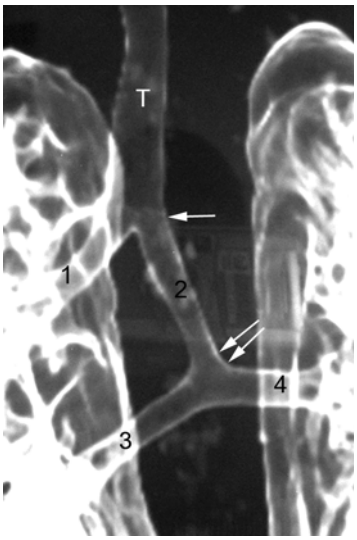


Fig 10c label

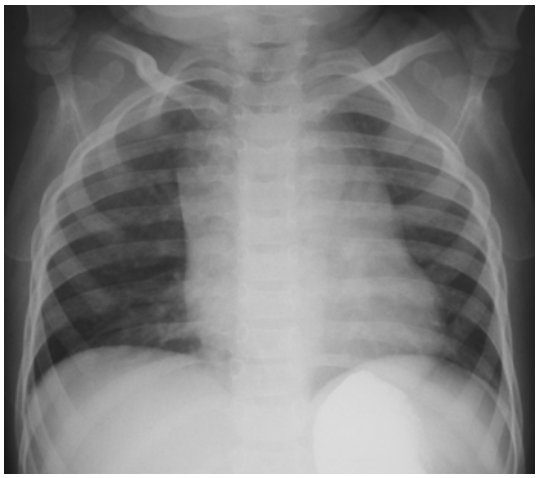


Fig 10d

CT was performed. The advantage of CT is simultaneous evaluation of the vessels and airway from the data obtained from single study, then post processing for 2D or 3D images of vessels and airway. Figure 10b, axial 3D image, shows left pulmonary artery (LPA) arising from right pulmonary artery (RPA) and coursing posterior to trachea (T) to the left lung.

Figure 10c, 3D image of airway in frontal projection, clearly shows tracheobronchial anomaly with two carina, which is almost impossible to see from plain chest radiograph (figure 10d).

The upper carina (single arrow) is in normal location and with normal carinal angle, while the lower carina (double arrows) is low and the second carinal angle is wide, giving “inverted-T” appearance. It was termed “bridging bronchus” by Gonzalez-Crussi, reported in 1976, as right lower lobe bronchus (3) arising from left main bronchus (2) bridging the mediastinum from left to right side. The bronchus to right upper lobe (1) arises from the carina. Usually there is long segment of tracheobronchial stenosis from complete cartilaginous ring of the trachea, as also found in this patient.

FINAL DIAGNOSIS : PULMONARY SLING & BRIDGING BRONCHUS