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# An unusual cause of respiratory distress

N Woznitza<sup>1</sup>, S Datsopoulos<sup>2</sup>, R Shukla<sup>3</sup> & N Aladangady<sup>2,4</sup>

1 – Radiology Department, 2 – Neonatal Unit, Homerton University Hospital, London, 3 – Paediatric Radiology Department, Royal London Hospital and 4 – Barts & The London School of Medicine and Dentistry, Queen Mary, University of London

## Introduction

Respiratory distress is a common presenting complaint in children and neonates. Thorough clinical assessment and sound appreciation of the broad range of differential diagnoses is key to enabling effective and subsequent targeted investigation and management of the condition.

## Case Presentation

A term female infant, who developed respiratory distress shortly after birth, requiring intubation and ventilation. Antenatal ultrasound demonstrated a persistent posterior mediastinal cystic structure. She was transferred to the Neonatal Intensive Care Unit for ongoing management.

## Imaging

Chest radiograph (CXR) [Figure 1]

- Smooth, well-defined homogenous mediastinal mass (M) with left lung hyperinflation (L)

Computed tomography (CT) [Figures 2 & 3]

- Mass closely related to the trachea (T) and oesophagus (O), displacing both of these structures to the right
- Compression of the left main bronchus (LMB), resulting in obstructive emphysema of the lower lobe (LL)

Radiological Differential Diagnosis

- Bronchogenic cyst
- Oesophageal duplication cyst

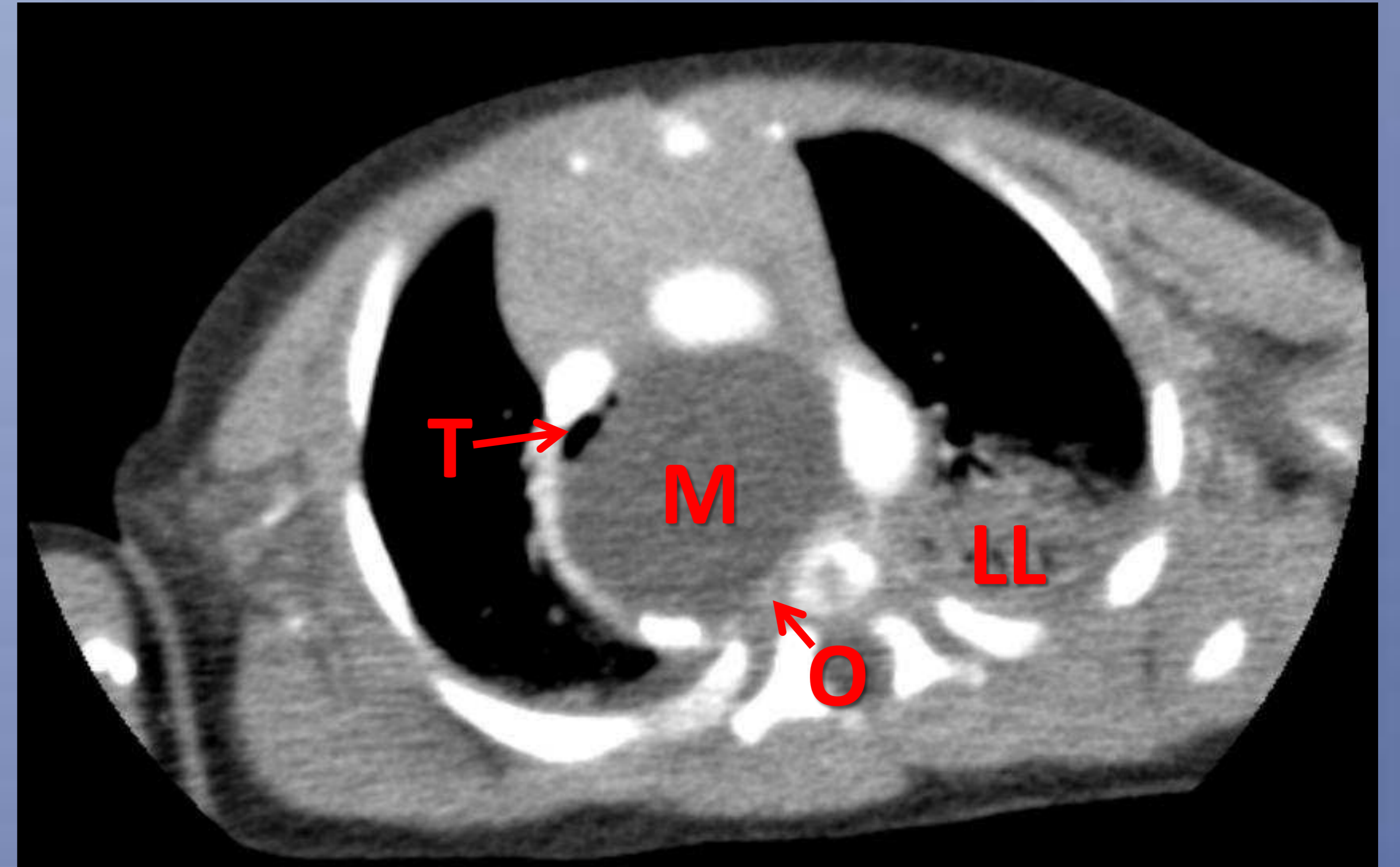


Figure 2. Post contrast CT chest (Axial view) confirms a cystic structure displacing the trachea

## Outcome / Management

The infant was stabilised and transferred to a surgical centre for cyst excision. Histopathology confirmed the diagnosis of a bronchogenic cyst.

## Discussion & Key Points

- While rare, bronchogenic cysts are one of the most frequent bronchopulmonary malformations (1)
- Unless considered in differential diagnosis, uncommon conditions may be missed
- Radiological appearances of bronchogenic cysts are non-specific, and often fail to reach a diagnosis (2,3)
- Histology is often required for a definitive diagnosis (2)

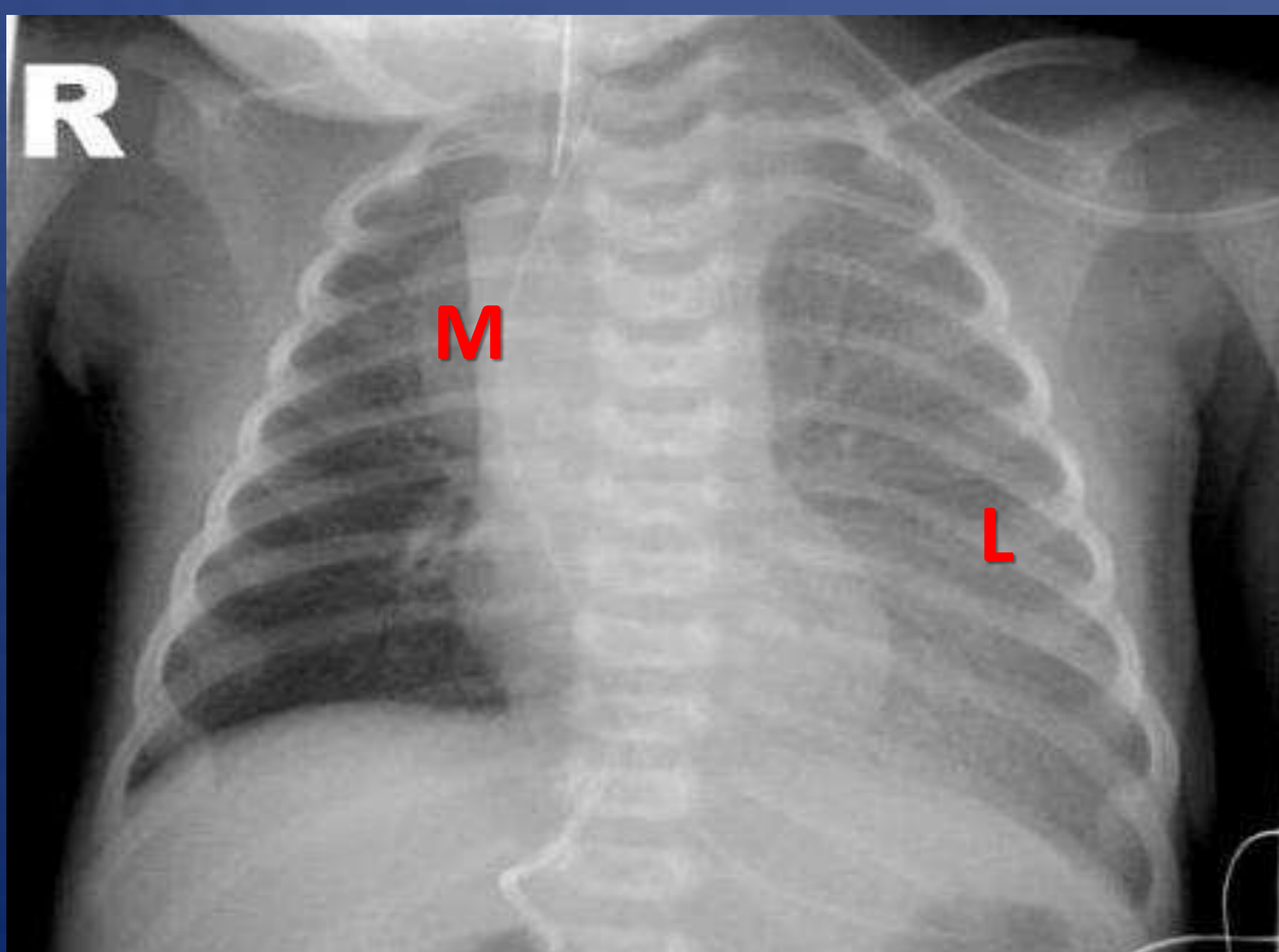


Figure 1. Chest radiograph reveals a middle mediastinal mass in the right paramedian region

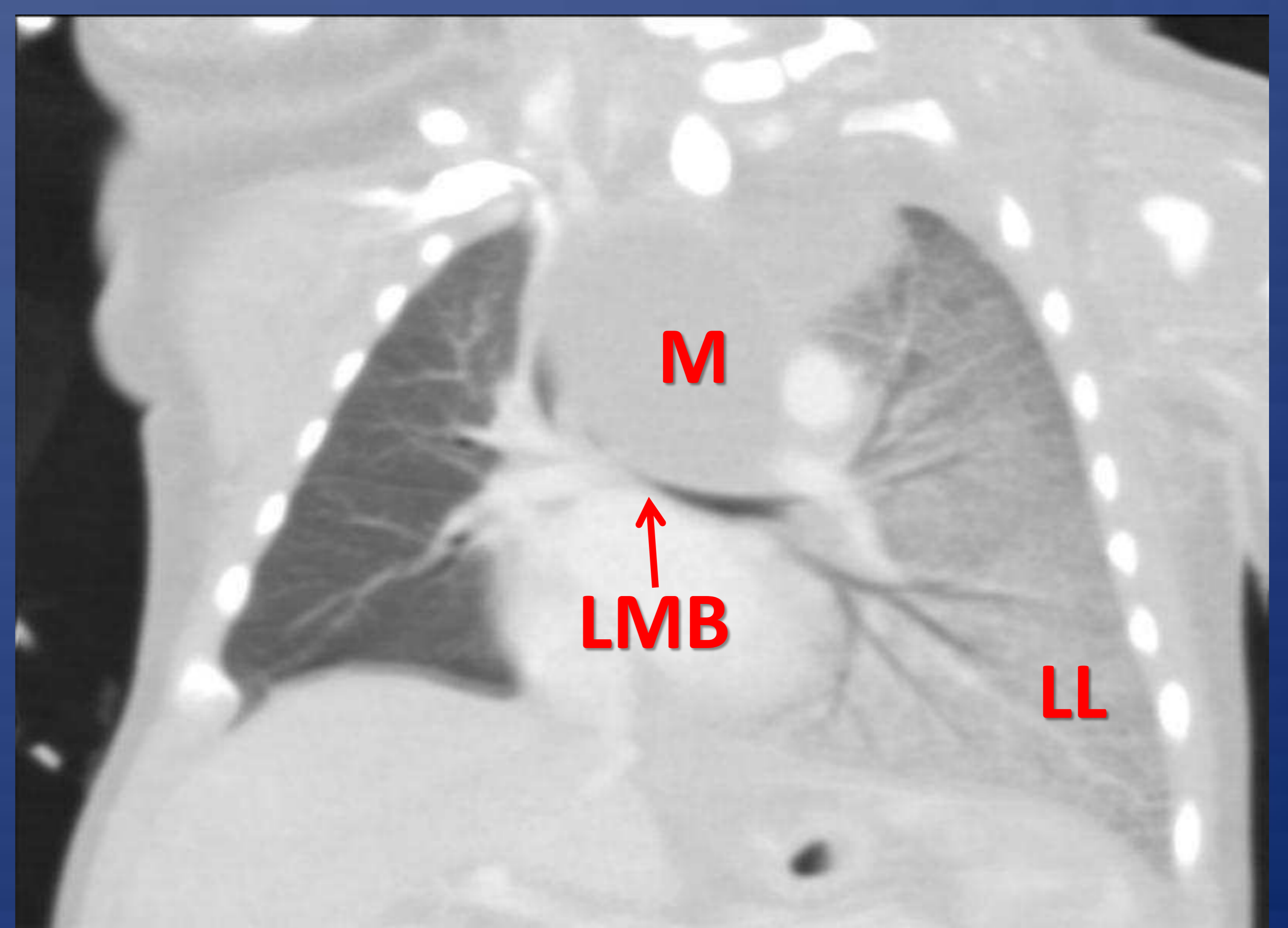


Figure 3. Post-contrast CT Chest (coronal view) displays the cystic lesion compressing the left main bronchus

## References

- 1 - Ahrens B, et al. *Symptomatic bronchogenic cyst in a six-month-old infant: Case report and review of the literature* J Thoracic & Cardiovascular Surgery 2001;122:1021-23
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