

## Clinical Image

# Uncommon Complex Thoracic Anomaly: Costovertebral and Bronchopulmonary Anomalies Accompanying Pulmonary Hypoplasia

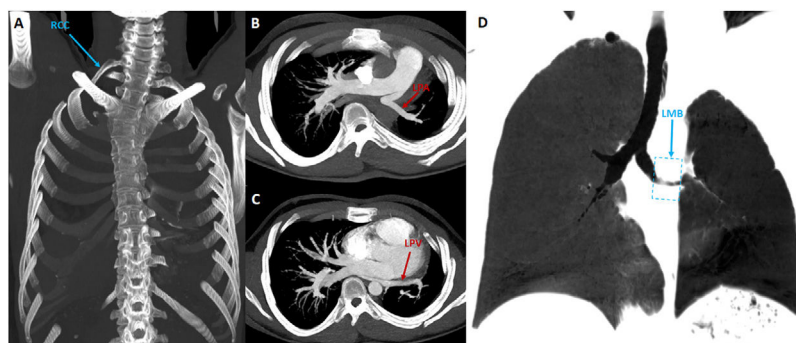


Yener Aydin<sup>a,\*</sup>, Elif Gozgec<sup>b</sup>, Hayri Ogul<sup>c</sup>

<sup>a</sup> Department of Thoracic Surgery, Ataturk University, Medical Faculty, Erzurum, Turkey

<sup>b</sup> Department of Radiology, Ataturk University, Medical Faculty, Erzurum, Turkey

<sup>c</sup> Department of Radiology, Duzce University, Medical Faculty, Duzce, Turkey



**Fig. 1.** Coronal plane volume rendering (VR) maximum intensity projection (MIP) images (A) reveal 7th cervical rib on the right and rotoscoliosis to the left in the thoracic vertebral axis. Axial plane volume rendering (VR) maximum intensity projection (MIP) sequential CT slices (B and C) show hypoplastic left pulmonary vein and pulmonary artery. Minimum intensity projection coronal CT scan (D) shows superior and intermediate bronchi of three lobes on the right, and a single unbranched bronchus of one lobe on the left and narrowing of the main bronchus. LMB: left main bronchus; LPA: left pulmonary artery; LPV: left pulmonary vein; RCC: right cervical costa.

A 28-year-old male presented with chest pain and dyspnea. Radiological evaluation revealed 7th cervical rib on the right, rotoscoliosis in the thoracic vertebral axis, hypoplastic left pulmonary vein and pulmonary artery, left pulmonary parenchymal hypoplasia, and single lobe in left lung (Fig. 1).

Congenital lung and pulmonary vascular hypoplasia is a rare congenital disorder that results in lung underdevelopment. They are usually diagnosed in childhood.<sup>1</sup> A cervical rib is a congenital deformity that usually attaches to the seventh cervical vertebra and occurs in approximately 0.5–1% of the population.<sup>2</sup> As in the case presented, costovertebral and bronchopulmonary anomalies accompanying pulmonary hypoplasia can very rarely be seen as complex thoracic anomalies.

## Funding

The authors received no financial support for the research and/or authorship of this article.

## Conflict of Interests

The authors declare that they have no conflict of interest in the publication of this article.

## References

- Pinheiro G, Alves AM, Rodrigues Neves I, Sequeira T. Left lung and pulmonary artery hypoplasia: a rare case of hemoptysis. *Eur J Case Rep Intern Med.* 2020;7:001490.
- Fliegel BE, Menezes RG. Anatomy, thorax, cervical rib. In: *StatPearls [Internet]. StatPearls Publishing; 2022.*

\* Corresponding author.  
E-mail address: dryeneraydin@hotmail.com (Y. Aydin).