

## An Unusual Pulmonary Lobe

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## Description Image

A 58-year-old man diagnosed with colon cancer underwent a thoracic CT scan as part of the preoperative evaluation.

A thoracic CT scan was performed as part of the pretherapeutic evaluation. The scan did not reveal any suspicious pleuro-parenchymal lesions. Additionally, we describe an incidental finding of an unusual pulmonary lobe: azygos lobe.

The azygos lobe is a rare anatomical variant of the right upper lobe of the lung, with a prevalence ranging from 0.4% on radiography to 1.2% on high-resolution CT scans. It is often incidentally discovered on imaging studies [1]. Typically located at the apico-medial part of the right lung, the azygos lobe remains separated from the rest of the right upper lobe by a visible fissure called the azygos fissure.

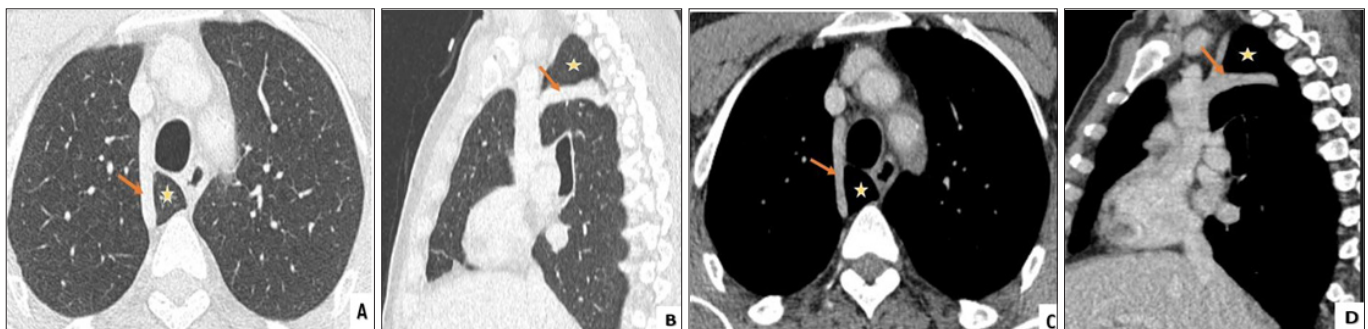
The azygos lobe forms during embryogenesis when the right posterior cardinal vein, one of the precursors of the azygos vein, fails to migrate above the pulmonary apex and instead penetrates it, accompanied by the parietal and visceral pleurae.

This forms a structure resembling the mesentery, known as the azygos meso or the azygos fissure, containing the azygos vein arch in its lower part [2].

The upper part of the fissure has a triangular shape containing a quantity of areolar tissue between the parietal layers, referred to as the “triangulum parietale.” The lower part of the azygos fissure has a teardrop shape and contains the azygos vein [3].

The azygos lobe is not a true distinct lobe since it lacks its own bronchus and does not correspond to a specific bronchopulmonary segment. Embryologically, the azygos lobe is part of the right upper lobe, and its bronchial and arterial supplies originate from the apical or posterior segment of the right upper lobe [4,5].

The identification of an azygos vein in its normal position at the angle between the trachea and the right main bronchus on a radiograph can be useful to exclude the presence of an azygos lobe. The diagnosis can be confirmed by computed tomography (CT) scan [1].



**Figure 1:** Axial and sagittal computed tomography (CT) of the same patient showing the right azygos lobe (★) separated from the upper lobe by an azygos vein (↘) in a lung window (A and B) and in a mediastinal window (C and D).

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