

Azygous lobe – A rare variant of pulmonary anatomy

Azygous lobe is a rare normal anatomic variant of right upper lobe. It was first described by Heinrich Wrisberg in 1778 [1]. The reported incidence was 0.2%- 1.2% [2]. A 60-year-old male patient presented to the surgical oncology outpatient department with difficulty in swallowing since 3 months. His upper gastrointestinal endoscopy showed ulcerative growth at lower third of the esophagus. Contrast enhanced computerized tomography (CECT) was done for staging of the disease which also incidentally revealed an azygous fissure along with an azygous lobe on the right side (Fig 1,2).

Azygous vein is normally formed by the union of the right subcostal vein and the right ascending lumbar vein. It enters through the diaphragmatic aortic hiatus into the thoracic cavity ascends up and joins the superior venecava. The azygous lobe is formed when the right posterior cardinal vein, which is one of the precursors of the azygous veins, penetrates the right lung apex

rather than migrating over it. This cardinal vein carries both the pleural layers resulting in entrapment of a portion of a right lobe. The folds of visceral and parietal pleura form a mesentery like structure, termed as azygous fissure, containing the azygous vein arch in its lower most portion [3].

There are only few case reported until now. Azygous lobe can be detected by routine chest radiography. Chest CECT can show a thickened azygous fissure from the posterior vertebral body extending to the superior venecava. The azygous lobe is not truly a separate lobe, as it does not have its own bronchus and does not correspond to specific bronchopulmonary segment.

Although azygous lobe is an incidental finding, it is of limited clinical importance. Sometimes it was missed or misdiagnosed as other diseases [4]. It can mimic bullae, abscesses [5] and sometimes the azygous vein located in the lower most part of azygous lobe can mimic a pulmonary nodule. Consolidation of the azygous lobe can mimic a lung mass. Hence, it is important for physicians and especially thoracic surgeons to recognize this anatomical variant.



Figure 1: Chest Contrast enhanced computerized tomography showing azygous fissure in the right lobe.



Figure 2: Chest Contrast enhanced computerized tomography showing azygous fissure in the right lobe.

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