



Bronchial atresia with calcified bronchocele

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A 59-year-old woman presenting with *situs inversus totalis* was admitted for exploration of a dense pulmonary nodule seen on a chest X-ray (Figure 1A). Physical examination and laboratory test findings were unremarkable. CT scans of the chest showed a branching, partially calcified nodular lesion in the left lower lobe with adjacent hypoattenuation (Figures 1B to 1E). The final diagnosis was bronchial atresia, given the absence of a history of infection, the branching of the nodular formation (bronchocele), and the hyperinflation of the adjacent parenchyma.

Bronchial atresia is a congenital abnormality characterized by focal interruption of a lobar, segmental,

or subsegmental bronchus, associated peripheral mucus impaction (bronchocele or mucocele) and hyperinflation of the obstructed lung segment. Most adults with this condition are asymptomatic. On chest CT, bronchial atresia is associated with a triad of findings that is pathognomonic for this condition: bronchocele, visible as a branching tubular or ovoid area of increased attenuation; hyperinflation of the obstructed pulmonary segment due to collateral ventilation; and pulmonary hypovascularity. The treatment for asymptomatic patients is conservative.^(1,2) Calcified bronchocele in the context of bronchial atresia is an extremely unusual finding.⁽¹⁾

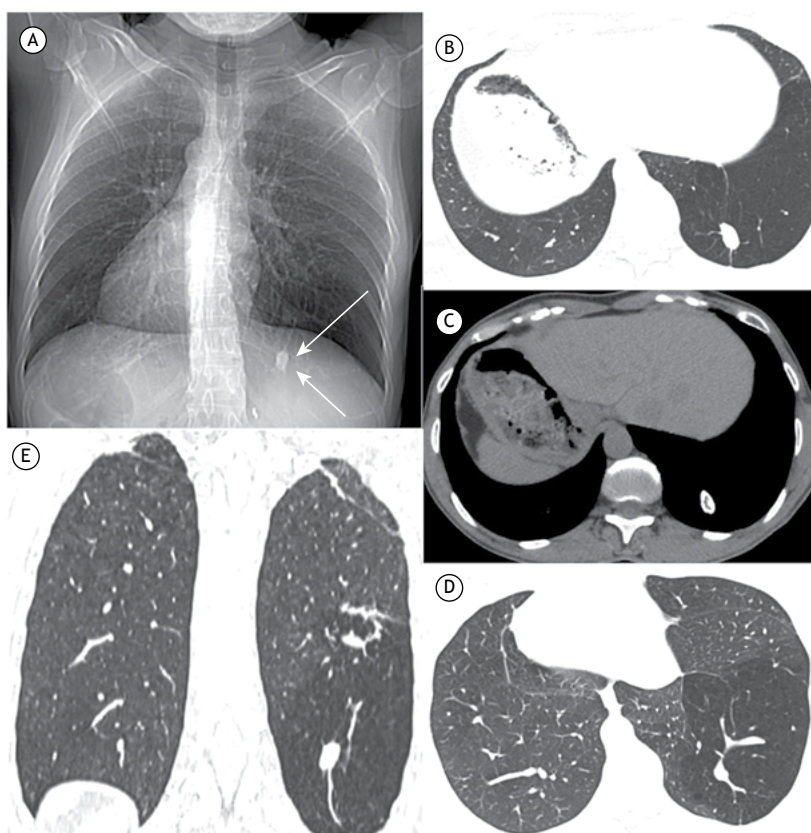


Figure 1. In A, a chest X-ray showing a nodular opacity in the left lower hemithorax (arrows) with adjacent hyperinflation. Axial (in B, C, and D) and coronal (in E) reconstructions of chest CT scans demonstrating a branching, partially calcified lesion in the left lower lobe (bronchocele). The adjacent lung parenchyma was hyperinflated with sparse vascularity. Note that the patient has *situs inversus totalis*.

REFERENCES

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