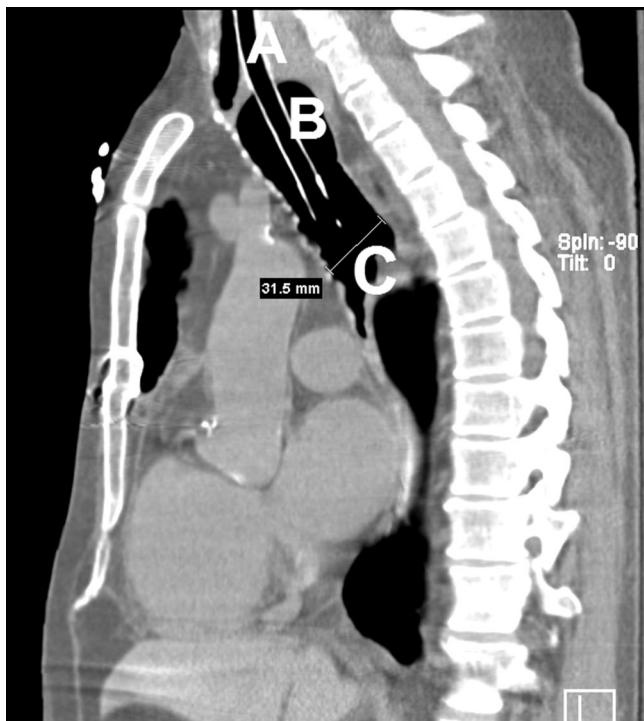


## Tracheobronchomegaly

### *A Rare Cause of Endotracheal Tube Cuff Leak*

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**A** 63-yr-old man (height, 173 cm) with a remote history of bronchiectasis and a double lung transplant was emergently intubated during a recent bout of bronchitis. An air leak was noted with positive-pressure ventilation through an 8.0-mm cuffed endotracheal tube until the cuff contained 12 ml air, with a cuff pressure of 22 cm H<sub>2</sub>O. This computed tomographic image shows the following: (A) the endotracheal tube *in situ* and (B) the cuff's location. The tracheal diameter below the tube (C) measured 31.5 mm; this caused the cuff leak. A medical record review revealed minor tracheobronchial dilatation before transplantation. This patient experienced Mounier-Kuhn syndrome, a rare condition first described in 1932. The syndrome is characterized by tracheobronchomegaly and is associated with tracheal diverticulosis and bronchiectasis. Patients present with recurrent pulmonary infections usually by the third or fourth decade of life. Although approximately 100 cases have been documented, the presentation is nonspecific and the condition may be missed on a plain radiograph; therefore, the true incidence is likely higher.<sup>1</sup> Tracheobronchomegaly is likely the result of atrophy of smooth muscle and elastic connective tissue in the conducting airways. The diagnosis is made radiologically when the diameter of the trachea, right main bronchus, or left main bronchus exceeds 30, 24, or 23

mm, respectively. Treatment is generally supportive and may include chest physiotherapy, antibiotics, tracheal stenting, and, rarely, pulmonary transplantation.<sup>2</sup> During general anesthesia, patients with tracheobronchomegaly are at risk of large airway collapse and obstruction, aspiration pneumonitis, and tracheal trauma after airway instrumentation.<sup>3</sup>

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