Should video-assisted surgery be the first-line approach for bronchogenic cysts?

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In their recent article, Chafik and colleagues[1] reported the case of a 51-year old man who presented with an intramural esophageal bronchogenic cyst that was successfully resected through a standard thoracotomy. Bronchogenic cysts occur more frequently in the mediastinum around the tracheobronchial tree or within the lung parenchyma. As for the risk of symptomatic compression, the topography of the cyst appears to be more important than its volume; in fact cysts located in the upper mediastinum may produce more compression than those located in the middle or inferior mediastinum.[2]

Computed tomography scans and endoscopic ultrasound remain the investigations of choice in all patients. These imaging techniques allow an accurate study of the lesions, and above all, their topographic relationship, in order to plan the most appropriate surgical approach.[3] Furthermore, endoscopic ultrasound facilitates the diagnosis of intramural esophageal lesions because of its capacity to clearly define the size, layer of origin, and pattern of the mass.[4]

In the discussion section, the authors assert that video-assisted thoracoscopy surgery is a less invasive option but carries a 10%–30% complication rate. We do not believe this is likely to be true. Thoracoscopic resection may be hazardous only in patients with infected cysts and adhesions to the adjacent mediastinal structures. De Giacomo and colleagues[5] reported details of 30 patients with mediastinal bronchogenic cysts, who had been successfully treated through a thoracoscopic approach without operative deaths or intraoperative complications. In only 2 cases was thoracoscopy converted to thoracotomy due to major pleural adhesions.[5] Thoracoscopic resection of mediastinal bronchogenic cysts is usually easy due to the hypovascular nature of these masses. During thoracoscopic excision of the mass, especially one located near the esophageal wall, as in open surgery, permanent transillumination of the esophagus through the esophagoscope is very useful because it allows control of the integrity of the esophageal mucosa.[2] We believe that a thoracoscopic approach for uncomplicated mediastinal cysts should be the primary therapeutic option because of the low rate of complications or conversion to a standard thoracotomy, with little impairment of the chest wall.

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