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10th International Workshop on Surgical Exploration of the
Mediastinum and Systematic Nodal Dissection



5th Meeting of the Thoracic Oncology, Thoracic
Surgery, Techniques & Transplant, Respiratory Nursing
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Society of Pneumology and Thoracic Surgery (SEPAR)



3rd Joint Meeting of the Spanish Society of
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10th International Workshop on Surgical Exploration of the
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SURGERY FOR TRACHEOBRONCHOMALACIA

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Tracheobronchomalacia (TBM) and Excessive Dynamic Airway Collapse (EDAC) are rarely diagnosed pathologies characterized by the weakening of the tracheal and bronchial walls, leading to a significant airway narrowing during respiration. Per definition TBM affects the cartilaginous parts of the airway, leading to a sagittal flattening of the airways. An excessive bulging of the membranous portion into the airway is termed EDAC. Symptoms in both types include chronic cough, dyspnea, recurrent respiratory infections, and airway obstruction, significantly impacting the quality of life. While mild cases can often be managed conservatively with medical therapies, severe TBM/EDAC may necessitate stenting or surgery.

Surgical treatment options for TBM aim for stabilization of the tracheobronchial walls and restoration of airway patency. The most common procedure is tracheobronchoplasty, which involves the posterior augmentation of the airway using mesh to restore the shape of the airway and to stabilize airway walls. This approach reduces airway collapse during expiration and improves airflow. Recently, large series have been published reporting the outcomes after robotic-assisted tracheobronchoplasty.

Although objective outcome parameters are yet to be defined, surgery generally improves symptoms, respiratory function, and quality of life in most patients. Multidisciplinary management is essential, and patient selection should be thorough, ensuring that the benefits of surgery outweigh the potential complications.

In conclusion, surgical treatment of TBM, particularly tracheobronchoplasty, offers an effective option for patients with severe disease, providing symptomatic relief and enhanced respiratory function.

Key references (1-3)

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3. Lazzaro R, Patton B, Lee P, Karp J, Mihelis E, Vatsia S, et al. First series of minimally invasive, robot-assisted tracheobronchoplasty with mesh for severe tracheobronchomalacia. *J Thorac Cardiovasc Surg.* 2019;157(2):791-800.