



Complex Airway Reconstruction Following Total Cricoidectomy for Laryngeal Chondrosarcoma

Margeaux Corby, MD; Annesha Basu, MD; Katherine Fedder, MD; James Daniero, MD
UVA Health

Objectives:

To present the unique case of a patient who underwent total cricoidectomy and subsequent airway reconstruction with costal cartilage and temporoparietal free flap. Highlight the challenges encountered in the perioperative period.

Methods and Materials:

Case report of a 55 yo man with low grade chondrosarcoma of the posterolateral cricoid with involvement of the left arytenoid. His only presenting symptom was hoarseness but the tumor was found to be progressive and threatening the contralateral arytenoid on surveillance imaging. A laryngeal preserving surgery and complex microvascular reconstruction was undertaken in an attempt to perform oncologically sound resection and restore function. A literature review of the presentation and management of this uncommon disease and even more rare surgical procedure was conducted.

Results:

Satisfactory oncologic resection achieved with preservation of swallowing and speech.

Conclusions:

Laryngeal chondrosarcomas are slow growing cancers with low rates of metastasis but often require total laryngectomy for cure due to location. This case describes the unique experience of performing total cricoidectomy with thyrotracheopexy and recreation of the cricoid with costal cartilage wrapped in temporoparietal fascia free flap.