

Excision of an Oral Spindle Cell Carcinoma Using Transoral Robotic Surgery

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Spindle cell squamous cell carcinoma, or spindle cell carcinoma (SpCC), is a rare and aggressive variant of squamous cell carcinoma. It occurs most often between the 6th – 8th decades of life and has a male predominance.

Presentation

An 86-year-old male with a history of right sided tonsillar carcinoma treated with tonsillectomy and combined chemoradiation therapy in 2004 (the tumor was not assessed for p16 status at that time), presented with a one-week history of dysarthria, aspiration, and a lump in his throat. He denied seeing or feeling the mass until a few weeks prior to his appointment today and maintains that he woke up one morning and felt the lump in his throat. Further review of symptoms was negative for fevers, weight loss, hemoptysis, shortness of breath, or chest pain. On physical exam of his oropharynx, there was a large mass at the base of the tongue on the right side that extended back into the oropharynx but did not obstruct his airway.

Patient Course

CT images revealed an intraluminal exophytic mass within the right oropharynx originating at the base of the tongue and extending onto the anterior tonsillar pillar (**Fig. 1**). An office biopsy was taken that exhibited fragments of necrotic tissue with focal viable cells that were atypical and pleomorphic in appearance. For definite surgical excision of the mass, the single port transoral robotic surgery with the da Vinci robotic system (Intuitive Surgical, Sunnyvale, CA, USA) was performed. During the procedure, the mass was elevated, with the Maryland grasper, to reveal that the large mass was connected to the base of the tongue with a small central stalk (**Fig. 2**). Bovie electrocautery was used to make an incision at this site. A resection of some normal mucosa was made along the base of tongue and then onto the anterior pillar ending with a successful excision of the lesion.

Diagnostic Evaluation

The initial pathology report showed an ulcerated polypoid spindle cell proliferation with multiple sinusoid type vessels in the depth of it showing somewhat radiating pattern from the center to periphery. The specimen was sent to an expert in head and neck pathology at an outside institute. Immunohistochemical staining revealed p53 positive spindle cells with adjacent squamous cell mucosa demonstrating severe dysplasia and elevated p53. Finally, cytokeratin showed there were scattered keratin chips admixed with the tumor cells. These findings were consistent with a diagnosis of SpCC.

Discussion/Conclusion

The advent of robotic surgery has begun to shift the treatment paradigm of oropharyngeal SCC back to operative management. Large scale trials are currently in work to learn more about the downstream effects of surgical intervention for primary oropharyngeal cancers. It is possible that with more surgeons choosing to use TORS in the initial treatment of lesions that we may see less cancers, like SpCC, that are associated with chemoradiation toxicity. A TORS-based therapy provides a means to accurately stage a lesion, select appropriate adjuvant therapy if needed, and achieve reasonable de-escalation of therapy while maintaining maximal oncologic control.



Figure 1: CT images revealed an intraluminal exophytic mass within the right oropharynx measuring approximately 1.6 x 3.0 x 3.2 cm originating at the base of the tongue and extending onto the anterior tonsillar pillar

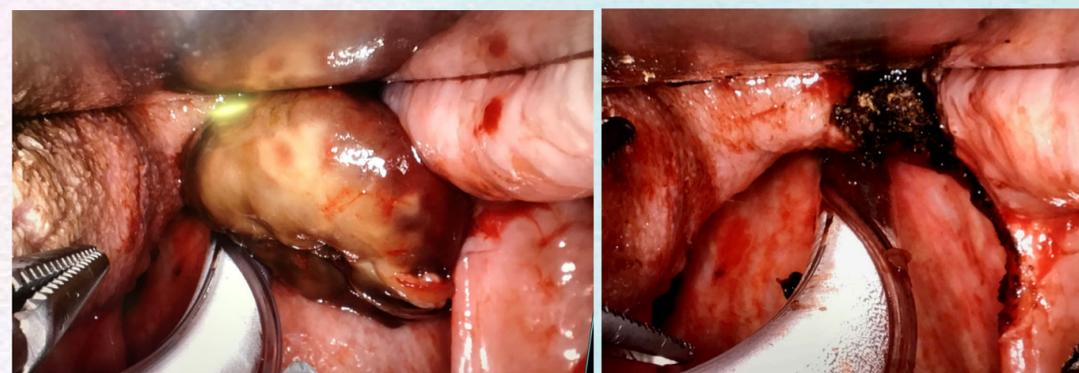


Figure 2: Large mass connected to base of the tongue with a small central stalk.