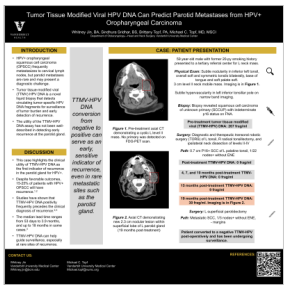
Head and Neck Surgery



(A648) Tumor Tissue Modified Viral (TTMV-HPV) DNA Can Predict Parotid Metastases from HPV+ Oropharyngeal Carcinoma

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Introduction: A positive TTMV-HPV test may be the first sign of recurrence in patients with HPV+ oropharyngeal squamous cell carcinoma (OPSCC). We report a case of a post-treatment rising tumor tissue modified viral (TTMV-HPV) DNA levels from intraparotid recurrence of a p16+ HPV+ OPSCC that returned to negative following parotidectomy.

Methods: A case report is described from a tertiary care hospital.

Results: A 59-year-old male presented with a left-sided neck mass, which was biopsied as squamous cell carcinoma of unknown primary with indeterminate p16 status on fine needle aspiration (FNA). His initial circulating TTMV-HPV DNA was 267 frag/ml. His primary tumor was ultimately found in the left tonsil and he underwent transoral robotic surgery (TORS) of the left tonsil with ipsilateral neck dissection level 2, 3, and 4. One of 22 nodes was positive for SCC without extranodal extension. Post-treatment TTMV-HPV was negative until 15 months post-treatment, when TTMV-HPV converted from negative to positive on two consecutive tests (9 and 30 frag/ml). This prompted CT and PET/CT imaging which revealed a 2.3 cm nodular lesion within the superficial lobe of the left parotid gland as an only site of disease. An ultrasound-guided fine needle aspiration was performed which confirmed carcinoma. The patient underwent a left superficial parotidectomy and facial nerve dissection with final pathology showing metastatic SCC to one intraparotid lymph node. Postoperatively, the TTMV-HPV converted back to negative.

Conclusions: TTMV-HPV can help predict disease recurrence from HPV+ oropharyngeal carcinoma, particularly in cases where metastatic lesions occur in less commonly expected anatomic subsites.