Detection of Recurrence in HPV Associated Oropharynx Squamous Cell Carcinoma


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Background

• Several retrospective and prospective trials have shown increased survival and decreased toxicity in patients with HPV+ OPSCC

• As the number of oropharyngeal cancer patients and survivors grows, so does the need to determine general time to recurrence and the most effective modes of recurrence detection, in order to guide optimal follow-up care
Method

• 246 Patients with either HPV+ or p16+ OPSCC who received definitive radiotherapy, most of whom received concurrent chemotherapy (85%)

• Median follow up was 36 months

• All patients had 3 month post treatment PET/CT and physical exams every 3 months in the 1st year following treatment, every 4 months in the 2nd year, and every 6 months in years 3 through 5
• 100% of **local failures** were detected by physical exam, including direct visualization (n=2) or flexible laryngoscopy (n=4).

• 89% of **regional failures** were found due to symptoms or 3 month post treatment imaging.

• Patients with ≥5 nodes or level 4 lymph nodes present were more likely to suffer regional failure.

• 71% of **distant metastases** were found due to symptoms or 3 month post treatment imaging.

• Increased risk with LN > 6 cm, bilateral LN, ≥5 LN, or level 4 LNs.

**Grade ≥ 3 late toxicity occurred in 9% of patients, with resolution in the majority for an overall toxicity of 2%**
Conclusions

• The majority of recurrences and toxicities can be detected by post treatment imaging at three months and physical exam during the first six months following treatment

• Minimizing tests that do not compromise outcomes will not only help decrease anxiety/stress for our patients but also ease the financial burden of cancer care

• Outcomes are excellent with low rates of permanent toxicity when treatment delivered by a specialized multidisciplinary team