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## ASO Author Reflections: Nodal Disease in Recurrent Oropharynx

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### Past:

Elective neck dissection is indicated for patients where the estimated risk of occult nodal disease exceeds 20% or in situations when surgical removal of the primary tumor will extend to the nodal echelons most at risk for harboring disease (Robbins). Therefore, a deep understanding of the prevalence and patterns of nodal distribution is required in order to best select which patients will require elective neck dissections. While there are multiple studies describing the patterns of nodal disease in the primary setting (shah), there is limited data for recurrent disease. For primary oropharyngeal carcinoma (OPSCC), the nodal basins most at risk are levels II and III. Over the past three decades the incidence of OPSCC has significantly increased (pytnia) and there remains a 25–36% risk of treatment failure resulting in a growing population of patients at risk for recurrent OPSCC. As such, it is becoming increasingly important to understand patterns of nodal disease in recurrent OPSCC.

### Present:

In this study we review a cohort of 95 patients with a history of prior head and neck radiation who required salvage oropharyngectomy for recurrent disease or second primary tumors to evaluate the prevalence and pattern of nodal disease. The overall prevalence of pathologic nodal disease was 21% (n=24/95) while the rate of occult nodal disease, cN0 with pN+, was 6% (n=4/65). The most common levels to harbor pathologic nodal disease were ipsilateral 15% (10/68) and contralateral 16% (5/31) level II. Bilateral disease occurred in 34% (9/24) of patients and was most common in patients with tumors of the base of tongue. Factors found to be predictive of pathologic nodal disease included recurrent T stage and time to recurrence under two years. This study is the first to describe the prevalence and distribution of nodal disease in patients undergoing salvage oropharyngectomy and suggest elective neck dissections may not be required for all patients in this cohort. (Heft Neal)

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**Future:**

This study provides evidence for the prevalence and distribution of nodal disease in a salvage oropharynx cohort. Nodal distribution is similar in the primary and recurrent setting. The prevalence of occult nodal disease is low at 6% and calls into question the need for elective neck dissection in all patients with recurrent OPSCC. While recurrent T stage and time to recurrence were found to be predictive of pathologic nodal disease, our study was limited by the small number of patients with occult nodal disease (n=4) which prohibited correlative analysis. As therapeutic neck dissections in patients with clinically evident disease is known to improve survival, future studies should focus on identifying factors that may help to predict occult disease. Further studies evaluating the relationship between radiation fields and dosage with nodal recurrence may also provide insight into which patients will most benefit from elective neck dissections.

**References:**

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