

OUTCOMES OF N3 HEAD AND NECK SQUAMOUS CELL CARCINOMA

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OTOLARYNGOLOGY

BACKGROUND: Patients with N3 neck disease tend to have poorer outcomes (overall survival (OS) 40–50% at 3 years) than patients with N1 or N2 neck disease. They are also rarer leading to a paucity of reliable studies and evidence about which treatment options are best for this patient subset. Our objectives were to review OS for patients with N3 neck disease receiving primary chemoradiation (CRT), primary radiation therapy (RT), or primary surgery followed by adjuvant therapy; and to review outcomes associated with planned neck dissection (PND) for patients undergoing primary CRT or RT.

METHODS: A single centre retrospective review from 2007–2014. Kaplan-Meier survival estimates with log-rank analyses were used for statistical comparisons of survival.

RESULTS: 23 of 35 patients identified were included in this study. 3-year OS was 46.1% (SE 10.8%). 3-year OS in patients treated with primary surgery, with primary RT, or primary CRT were 60.0% (SE 21.9%), 0%, and 55.1% (SE 13.9%) respectively ($p=0.06$). OS for those planned to have a neck dissection ($n=4$) were 50.0% (SE 25.0%), compared with 42.9% (SE 13.2%) for those that had either no neck dissection or salvage neck dissection ($n=14$), ($p=0.526$).

CONCLUSION: Overall survival was within the range found in similar studies. The greatest limitations of this study were sample size, and lack of randomization. Patients had similar survival at 3 years whether they had primary surgery with adjuvant treatment compared with primary CRT. Radiation alone was inferior with 0% survival at 3 years. This study was unable to show a significant survival advantage of PND in CRT patients.