EXTRATHYROIDAL EXTENSION PREDICTS EXTRANODAL EXTENSION IN PATIENTS WITH POSITIVE LYMPH NODES: THE CASE FOR UPSTAGING OF MINIMAL EXTRATHYROIDAL EXTENSION

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Background/Purpose: While there is consensus that significant extrathyroidal extension (ETE) (T4) should upstage a patient with well differentiated thyroid cancer, the importance of minimal ETE (T3) remains controversial. Additionally, the importance of nodal metastases on prognosis has come under scrutiny. Recent publications highlight the importance of size, number of positive nodes, and in particular the presence of extranodal extension (ENE) as measures of disease aggressiveness. In this study we examined whether ETE is a predictor of ENE.
Methods: A retrospective review was conducted from January 2004 to March 2013. All node positive patients who underwent total or completion thyroidectomy were included. Histologic features defined by the CAP protocol for thyroid carcinoma were recorded.
Results: 193 patients qualified for review. Patients who were found to have ETE were 12.01 times more likely to have ENE than patients with intrathyroidal primary tumors ($p<0.000$). After exclusion of all T4 cases ($n=6$), patients with minimal ETE were 13.12 times more likely to have ENE than those with no ETE ($p<0.000$). Twenty percent of microcarcinomas with ETE demonstrated ENE.
Discussion & Conclusion: We have found that the biology of the primary tumor is conferred to the lymph node and leads to a higher incidence of ENE. Awareness of this relationship should be accounted for in the management of primary and recurrent lymph nodes. This study shows that minimal ETE is a significant predictor of ENE and we recommend that minimal ETE continue to be used to upstage patients from T1 to T3.