

## **IS THERE A SURVIVAL BENEFIT WITH TOTAL THYROIDECTOMY FOR HURTHLE CELL CARCINOMA**

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**Background/Purpose:** Hurthle cell carcinoma (HCC) is known to be an aggressive thyroid cancer seen in 3% of thyroid carcinomas. While previous studies have reported unclear survival benefit, many patients still undergo thyroid lobectomy for HCC. The objective of our study was to analyze long term survival in HCC patients undergoing partial or total thyroidectomy.

**Methods:** A retrospective analysis of 106 patients from 2000-2010 from a tertiary care hospital tumor registry was performed. Patient demographics, tumor characteristics including tumor size, type of surgery – thyroid lobectomy (TL) versus total thyroidectomy (TT) and post-operative radioiodine therapy (RI) were collected. Standard methods of survival analysis (i.e. Kaplan-Meier survival curves, log-rank test) were performed to compare the two groups.

**Results:** Our sample consists of 106 patients, 67% were females (n=71) with average age of 60 years (range 35-85 years). 49 patients (46.3%) underwent TT, of which 80 % (n=39) patients received RI. The tumor stage distribution was similar in both groups (TL vs. TT). 44 % (n=19/43) patients were N0 in TL group compared to 54% (n=21/39) for the TL group. However the tumor and nodal stage did not demonstrate a statistically significant difference between the groups. 5 year survival analysis showed 96 % vs. 84% for TL vs. TT (p<0.09). No long term survival benefit was observed among post TT patients receiving RI.

**Discussion & Conclusion:** Thyroid lobectomy appears to be a comparable surgical option for patients with HCC. The survival benefit of postoperative radiotherapy is unclear.