

## MANAGEMENT OF SECONDARY THYROID CANCER

Russell, Jonathon<sup>1</sup>; Yan, Kenneth<sup>2</sup>; Chute, Deborah<sup>3</sup>; Scharpf, Joseph<sup>1</sup>

<sup>1</sup>Head and Neck Institute, Cleveland Clinic, Cleveland, OH, USA; <sup>2</sup>Case Western Reserve University School of Medicine, Cleveland, OH, USA; <sup>3</sup>Anatomic Pathology, Cleveland Clinic Foundation, Cleveland, OH, USA

**Background/Purpose:** Cancer from secondary sites metastatic to the thyroid gland is a rare occurrence. While total thyroidectomy is generally well-tolerated, it does expose patients to potential greater morbidity. Indications for lobectomy versus total thyroidectomy in these cases are poorly defined. We sought to delineate if local control and functional outcome were affected by choice of initial surgical management.

**Methods:** A query of the pathology database and thyroid cancer registries identified patients with cancer metastatic to the thyroid gland. Incidence of thyroid lobectomy vs. total thyroidectomy was noted and functional outcomes as well as local recurrence were reviewed. A review of available English language literature for historic management of metastatic disease to the thyroid was performed.

**Results:** 24 patients were identified with metastatic tumors to the thyroid from renal (61%), breast (13%), lung (13%), and colon (9%) primary tumors, among others. 6 (26%) of patients were managed with total thyroidectomy. Lobectomy versus total thyroidectomy did not influence long term functional deficits. However, two lobectomy patients experienced local recurrence in residual thyroid.

885 cases were identified in the literature, with lung (175), breast (174), and kidney (154) predominating. Of 99 patients managed with thyroidectomy, 56% underwent total thyroidectomy. Outcomes and recurrences were similar between those managed with total vs. partial thyroidectomy. 46 patients were managed expectantly.

**Discussion & Conclusion:** Secondary thyroid cancer is a rare condition most often of renal, breast, or lung origin. Thyroid lobectomy vs. total thyroidectomy does not appear to impact functional outcomes or local recurrence.