

IS AGE ASSOCIATED WITH RISK OF MALIGNANCY IN THYROID CANCER?

Bastianelli, Mark¹; Do, Bao Anh¹; Forest, Veronique-Isabelle²; Mlynarek, Alex²; Tamilia, Michael³; Hier, Michael²; Payne, Richard²

¹Faculty of Medicine, McGill University, Montreal, Canada; ²Department of Otolaryngology, Sir Mortimer B. Davis Jewish General Hospital, McGill University, Montreal, Quebec, Canada; ³Division of Endocrinology, Jewish General Hospital, McGill University, Montreal, Quebec, Canada

Background/Purpose: Many predictive and prognostic (AMES, AGES, or MACIS) models for thyroid cancer have been proposed. Age is considered in all of them.

Objective: To establish whether patients' age correlates with the rate of malignancy, size, and aggressiveness of the thyroid cancer.

Methods: A retrospective analysis of 1022 patients undergoing consecutive thyroidectomy. The patients were divided based on age at the time of surgery (<45 years old (yo) and ≥45yo). Data regarding size of thyroid nodules, presence of lymph node (LN) metastasis, and final thyroid pathology including the presence of extrathyroidal extension (ETE) were retrieved.

Results: There were 396 patients <45yo and 626 patients ≥45yo. The rates of malignancy were 67.2% and 68.7% respectively (p=0.111). Patient's >45yo show a trend toward increased presence of LN mets (19.4% vs. 14.9%; p=0.067). In addition, male patient's were more often associated with LN metastasis (18.9% vs. 15.8%; p= 0.0517). When patient's were stratified for age patient's >80yo demonstrate increased incidence of LN metastasis compared to the rest of patient population (40.0% vs. 16.2%; p=0.048). There was no significant difference in regards to size of thyroid nodules (p=0.265) and the rate of ETE (16.2% vs. 16.5%; p=0.971).

Discussion & Conclusion: In this study, rate of malignancy and ETE were independent of the age of the patient. While patients <45 demonstrate a trend towards increased LN metastasis. Furthermore, LN metastasis is more often associated with males and patient's >80yo.