

ARC3: Association Of Ultrasonographic Findings And Thyroid Malignancy In A Tertiary Hospital In Metro Manila

Author:

Clint S. Trinchera, MD

Level IV Resident

Co-Author:

Emmanuel Tadeus S. Cruz, MD, FPSOHNS

Quezon City General Hospital

Department Of Otorhinolaryngology- Head And Neck Surgery

BACKGROUND: High suspicion of thyroid malignancy is considered if the following are present in ultrasonography: solid hypoechoic nodule, irregular margins, microcalcifications, taller than wide shape of the thyroid nodule, and evidence of extrathyroidal extension.³

OBJECTIVE: To determine the association of thyroid malignancy and the following ultrasonographic findings: presence of solid hypoechoic nodule, irregular margins (infiltrative, microlobulated, or speculated), microcalcifications or disrupted rim calcifications with small extrusive hypoechoic soft tissue component, taller than wide shape of the thyroid nodule, and evidence of extrathyroidal extension.

METHODS

- a. Study Design: Cross-sectional analytical
- b. Setting: Tertiary Government Hospital In Quezon City
- c. Subjects, Participants, Patients or Population: Patients who were admitted at the Otorhinolaryngology- Head and Neck Surgery ward of a tertiary hospital diagnosed with nodular non toxic goiter, multinodular non toxic goiter, and thyroid malignancy who underwent thyroid surgery January 2017 to June 2018.

RESULTS: A total of 33 subjects were included in the study. Thirteen (39.4%) patients had malignant while 20 (60.6%) had benign results respectively. There was a significant association between presence of solid hypoechoic nodule, irregular margins and microcalcifications with malignant histopathology results. No significant difference was noted in the proportion of subjects with malignancy according to taller than wide nodules or presence of extrathyroidal extension. In the multivariate analysis using logistic regression, only microcalcification was found to be a significant predictor of malignancy (OR 8.96, 95% CI 1.02 – 87.19, p 0.05).

CONCLUSIONS: There was a significant association between presence of solid hypoechoic nodule, margins and microcalcifications with thyroid carcinoma. Only microcalcification was found to be a significant predictor of thyroid malignancy on ultrasound.

KEYWORDS: thyroid, thyroid carcinoma, ultrasonography