

High Malignancy Risk among South Indian Patients with Bethesda II Thyroid Nodules

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OBJECTIVES

To study the prevalence of malignancy among south Indian patients with Bethesda II nodules

METHODS

This retrospective study was conducted in Narayana Medical College and Hospital, Nellore. Patients with thyroid nodule who underwent surgery between January 2008 and September 2015 and a preoperative fine needle aspiration cytology report of Bethesda II were included in the study. Age, gender, family history of thyroid malignancy, size of the biggest nodule on ultrasound, evidence of calcification or neck nodes on ultrasound were noted from the case records. Patients with inadequate data were excluded from the study.

RESULTS

A total of 563 patients were included in the study. A total of 48 (8.5%) patients had malignancy including papillary thyroid carcinoma (n=39), follicular thyroid carcinoma (n=5), anaplastic thyroid carcinoma (n=1) and encapsulated follicular variant of PTC (n=3). Age, gender and maximum nodule size were not associated with malignancy. Multinodularity, thyroid calcification or neck lymph nodes with loss of hilar architecture on ultrasound were positively associated with malignancy whereas presence of thyrotoxicosis was negatively associated with malignancy.

CONCLUSION

We report high prevalence of malignancy among south Indian patients with Bethesda II thyroid nodules. Bethesda II thyroid nodule patients with thyroid calcification or neck lymph nodes with altered hilar architecture on ultrasound should be considered as high risk for malignancy.