



INCIDENTAL THYROID CANCER FREQUENCY IN TOTAL THYROIDECTOMY FOR THE GRAVES DISEASE PATIENTS AND THE EFFECT OF THE PRESENCE OF NODULES ON MALIGNANCY RATES



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INTRODUCTION

➤ Our objective for the current review was to investigate the thyroid cancer frequency rate within the patients who have had total thyroidectomy procedure for definitive Graves' disease treatment and to evaluate the contribution of the presence of nodules to malignancy rates

➤ The cases were divided into two groups regarding to nodule presence. Pre-operational USG revealed nodules in 19 cases. Five of these patients had malignancy.

➤ The malignancy frequency was significantly higher in the nodule positive group than the nodule negative group (26.3% vs. 4.6% respectively, $p=0.004$).

➤ There was also no statistically significant TSH receptor antibody, Anti-thyroid peroxidase (Anti-TPO) antibody titres and thyroid functioning differences between these groups ($p>0.05$).

MATERIAL AND METHODS

➤ The present study was conducted retrospectively by scanning the data of 214 patients who were applied total thyroidectomy for permanent Graves disease treatment.

➤ The participants were separated into 3 subgroups; benign nodule group, malignant nodule group and nodule negative group. The groups were also compared in regards to demographic characteristics and laboratory data.

Table 1. Comparison of benign and malignant groups according to nodule and TRAB positivity

	Benign N (%)	Malignant N (%)
Case number	200 (%93,5)	14 (%6,5)
Nodule positivity	14 (%4,6)	5 (%26,3)
TRAB (+)	127 (%60,4)	7 (%50)

RESULTS

➤ 14 of the 214 cases were diagnosed with thyroid cancer. The malignancy prevalence was determined as 6.5%. The sex distributions were found to be statistically similar between the malignant and benign nodule groups ($p=0.776$).

➤ The mean age of the malignant nodule group was significantly higher than the benign nodule group ($p=0.042$). No significant differences was found between the benign and the malignant nodule group in regards to median Thyroid Stimulating Hormone (TSH) receptor antibody levels ($p=0.134$)

CONCLUSION

➤ We have determined the incidental thyroid cancer frequency in Graves' disease patients population as 6.5%. Malignancy rate was found higher when co-morbid nodules were present (26.3%).

➤ We recommend that when total thyroidectomy is performed for the treatment of Graves' disease, especially if nodules are present, malignancy risk must be take into consideration