

Thyrotropin Hormone Level as Predictor for Papillary Thyroid Carcinoma in Patients with Thyroid Nodule

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Objective: To assess thyrotropin hormone level as predictor of papillary thyroid carcinoma.

Design: A Retrospective Study.

Setting: Salmaniya Medical Complex, Bahrain.

Method: Biochemical results of thyroid function, FNAB and histological reports of 319 patients (277 females and 42 males) were retrospectively evaluated.

Result: Thirty-seven (11.6%) patients had papillary thyroid carcinoma (PTC) and 282 (88.4%) patients had benign multinodular goiter (BMNG). Twenty-eight (10.1%) had PTC in females on final histopathology diagnosis and 9 (21.4%) in males, both genders had thyroid nodule, ($P < 0.05$). The mean TSH level was 5.85 mIU/L (± 20.6). The mean TSH level was significantly higher in patient with PTC than those having benign thyroid disease (BTD) ($P < 0.0001$). Subgroups analysis revealed no statistically significant difference among patients harboring PTC and those diagnosed as BTD.

Conclusion: High incidence of PTC is associated with TSH above the clinical reference range. It is recommended that patients with TSH in the upper reference range should be subjected to FNAB for possible carcinoma.

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