

en cytology and thyroid

function test

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Abstract:

BACKGROUND: Thyroid dysfunction can be evaluated by measuring serum thyroid stimulating hormone (TSH), total tri-iodothyronine (T3) and total thyroxine (T4) which will establish euthyroidism, hyperthyroidism and hypothyroidism. Fine needle aspiration (FNA) is the diagnostic test of choice in determining whether a nodule is benign or malignant. **OBJECTIVE:** To correlate hormonal levels to FNA cytologic findings. **DESIGN:** A cross-sectional study. **SETTING:** Kenyatta National Hospital (KNH). **RESULTS:** Forty two patients had their thyroid profiles done and the results were correlated with FNA diagnosis. Majority of patients had nodular goiter (83.3%), of which 47.6% had euthyroidism, 16.7% had biochemical euthyroidism, 11.9% had hyperthyroidism, 4.8% had sub-clinical hyperthyroidism and 2.4% had sub-clinical hypothyroidism. Three patients (7.1%) with FNA diagnosis of non-diagnostic sample had euthyroidism while 2.4% each with papillary carcinoma, thyroglossal cyst, and atypia, had a hormonal profile of euthyroidism. There was no significant statistical difference ($p > 0.05$) of the mean levels of T4 (0.406), T3 (0.311), and TSH (0.90), between and within the various groups of FNA cytological diagnoses. **CONCLUSION:** The study showed that there was no correlation between T4, T3, and TSH easurements and FNA cytological diagnoses