Fine needle aspiration cytology of thyroid nodules using The Bethesda system for reporting thyroid cytopathology.

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Abstract:

Background: The objective of this study was to analyze the thyroid cytology smears by The Bethesda system for reporting thyroid cytopathology (TBSRTC), to determine the distribution of diagnostic categories and subcategories, to analyze accuracy rates and to correlate the cytopathology with histopathology, wherever surgery was done. **Materials and methods:** This is a retrospective study of 130 cases of Fine needle aspiration cytology (FNAC) for thyroid swellings. The reporting of thyroid lesions is carried out using the Bethesda system for reporting of thyroid lesions and correlated when surgical was available. **Results:** Out of 130 cases studied 9 (6.9%) cases are of Bethesda Category I ; 114 (87.69%) patients showed category II lesion; Benign follicular lesion, 2 (1.54%) patients showed follicular neoplasm, category IV lesion and 5 (3.85 %) patient showed category VI - malignant lesion. The accuracy rate of FNAC on histopathological correlation in diagnosis for category II (Benign follicular lesion), category IV (Follicular Neoplasm) and category VI, (Malignant) lesions were 93.22 %, 100 % and 80 % respectively. **Conclusions:** Thyroid FNA using the Bethesda system for reporting of thyroid lesions will facilitate communication among cytopathologists, endocrinologists, surgeons, radiologists, and other health care providers; facilitate cytologic-histologic correlation for thyroid diseases; facilitate research into the epidemiology, molecular biology, pathology, and diagnosis of thyroid diseases; and allow easy and reliable sharing of data from different laboratories.

Key Words: Folllicular neoplasm, Goiter, Malignant, The Bethesda System for Reporting Thyroid
       Cytopathology, Thyroid lesions, Thyroiditis.

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