

Role of Fine Needle Aspiration Cytology [FNAC] in diagnosis of Thyroid lesions

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Abstract

Background: FNAC of the thyroid gland is now a well established first line diagnostic test for the evaluation of diffuse as well as nodular lesions of thyroid. The main purpose of FNAC is confirming benign lesions and thereby reducing unnecessary surgery. **Objectives:** this study was aimed at evaluating experience of FNAC and correlating the findings with tissue biopsy – in the diagnosis of thyroid lesions. **Methods:** Patients with neck swellings attending medical, surgical and ENT outpatient clinics and wards with thyroid lesions were sent to department of pathology, PIMS Hospital, Karimnagar where FNAC was done. Before aspiration, a detailed history and clinical examination was done. FNAC was performed in all cases using 23 Gauge Needle attached to 20 ml disposable syringe. Smear was prepared on standard glass slides fixed and stained with H&E or MGG stains. **Results:** A total of 66 cases were included in the study. Majority of cases were reported as benign lesions by FNAC n=58 (87.88%) and Histopathology showed n=60 (90.91) as benign lesions. The percentage of malignant lesions reported by FNAC was n=8 (12.12%) and by histopathological examination n=6 (9.09%) were reported as malignant lesions. The sensitivity was calculated at 96.67% and the specificity was 96.77% the PPV value was 90.61% and the NPV was 96.77%. **Conclusions:** FNAC is it is a cost effective procedure which can be performed on outpatient basis and it can be repeated due to patient acceptance. Its sensitivity and specificity are within acceptable range provided standard protocol is adopted. It bridges the gap between clinical evaluation and histopathologic diagnosis in majority of cases.