Institutional Analysis of Diagnostic Yield of Ultrasound Guided
Thyroid FNA

Sir

Thyroid Fine Needle Aspiration (FNA) is a safe, effective means of assessment of thyroid cancer. Ultrasound guided FNA (UG-FNA) provides a more accurate and cost effective means of diagnosis of thyroid cancer than palpation guided FNA. This report looked at the institutional experience of UG-FNA of the thyroid which were carried out over a 9 year period in the Adelaide, Meath and National Children's Hospital in Dublin. Seventy four cases of which were identified in the period mentioned. The cytoLOGY samples were reported as benign, suspicious, inconclusive of inadequate samples. Of the 74 patients, 53 (72%) cytology results were reported as benign, 11 (15%) cytology reports showed insufficient yield for analysis, 5 (7%) FNA cytology reports showed malignant cells present, 4 (5.4%) were reported as suspicious though inconclusive, and 1 (1.3%) cytology result was reported as inconclusive.

Of the 4 cytology reports that were suspicious though inconclusive, subsequent excision histology of these cases showed 1 case of papillary carcinoma with the remaining histology results reported as benign. Five UG-FNA showed that malignant cells were present - with subsequent excision histology showing 2 cases of papillary carcinoma and 2 cases of follicular carcinoma. One case showed a cytology sample queried Hurthle cell neoplasm, which was histologically reported as a hyperplastic nodule.

The use of UG-FNA of the thyroid results in a low rate of non-diagnostic biopsies which may decrease the number of unnecessary thyroidectomies performed to rule out malignancy as well as select patients who do require surgery. The confirmed number of cases of thyroid cancer in this review remained low at 5.4% with 72% of cases reported as benign. The challenge remains in the management of nodules that are cytologically classed as “indeterminate.” These patients may be subjected to further UG-FNA or surgical intervention because histological examination is the only way in which a malignancy can be excluded. Surgery followed by radioactive iodine ablation is the mainstay of treatment for differentiated thyroid cancers, and the majority of patients can expect high cure rates.

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References