

The value of thyroid fine needle aspiration in evaluation of follicular neoplasms

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Abstract

Background&Objective: The presence of single or multiple nodules within the thyroid gland is a common clinical problem. It is impossible to differentiate benign and malignant follicular neoplasms in cytologic examinations. Estimation of risk of malignancy in thyroid nodules who are cytologically assumed to be follicular neoplasm has a critical importance. The aim of this research is evaluation of diagnostic value of thyroid FNA in follicular neoplasm.

Materials&Methods: This survey was done on 476 patients with thyroid nodule whom were biopsied in a 7 years period (in 5th Azar hospital, Gorgan). Standard aspirations and biopsies techniques performed and necessary smears prepared. Wet-fixed smear glass slides are placed immediately in alcohol (70%) 7-10 slides from the aspiration. The patients with cytologic report whom considered follicular neoplasm followed total thyroidectomy or lobectomy.

Results: From 476 patients for thyroid nodules 412 cases (86.5%) are suitable for cytologic evaluation which 312 cases (77.9%) of them were benign and 14 cases (3.3%) were malignant. The rest (77 cases) reported to have follicular neoplasm, these patients also undergone thyroid surgery. The result of histological findings appeared in 32 cases (57.1%) follicular adenoma, 15 cases (26.7%) non-neoplastic nodules, 5 cases (8.9%) follicular carcinoma and 4 cases (7.1%) follicular type of papillary carcinoma.

Conclusion: 9 cases (16%) found malignant among cases which cytologic reports considered as "follicular neoplasms" and subsequently undergone thyroid surgery (consist of follicular carcinoma and follicular type of papillary carcinoma), confirm the importance of histopathologic study of follicular lesions for differentiation between malignant and benign lesions.

Key Words: Needle aspiration – Follicular neoplasms – Thyroid nodule