HISTOPATHOLOGICAL RESULTS OF SUSPICIOUS NODULES IN THE PATIENTS WITH HASHIMOTO THYROIDITIS

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INTRODUCTION AND AIM:

The most endocrinologists in routine practice are used to Bethesda classification for evaluation of thyroid nodule in fine needle aspiration biopsy (FNA). It is accepted that FNA biopsy is an accurate diagnostic and gold standard test. However, false-positive diagnosis may sometimes occur as a patient with a “malign” lesion is found incorrectly rather than an actually benign lesion on histological examination. Hashimoto’s thyroiditis probably is the most common cause of false-positive cytology. The aims of present study evaluate retrospectively postoperatively biopsy results in patients with Hashimoto disease have a thyroidectomy.

MATERIALS AND METHODS:

Results of totally 29 patients with Hashimoto thyroiditis achieved from our hospital records. All of the patients had undergone totally or subtotals thyroidectomy. We re-evaluated retrospectively biopsy results postoperatively. We compared their preoperative FNA results.

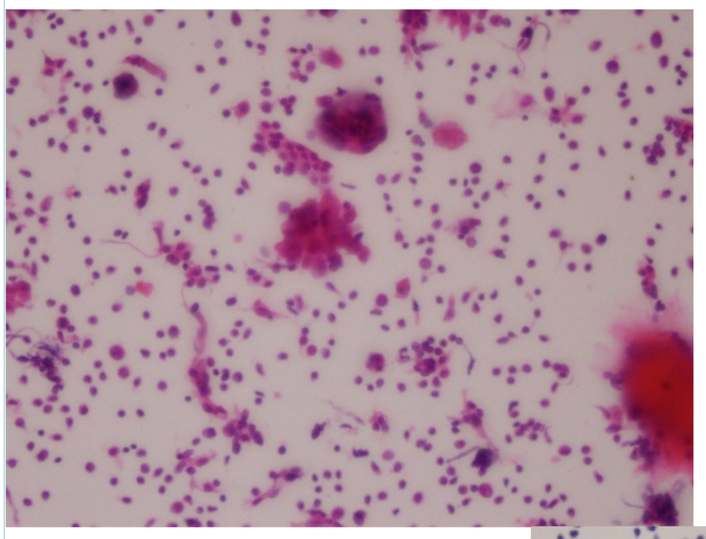
RESULTS:

We detected 24.1% papillary thyroid cancer in 7 patients (mean age 45.5 11.9 year), 44.8 % nodular goitre in 13 patients (mean age 45.8 4.9 year), 13.7 % adenomatous nodule in 4 patients (mean age 43.5 14.4 year), 3.4 % hurtle cell adenoma in 1 patient with 56 years old. But, 14% in 4 patients with Hashimoto thyroiditis (mean age 41.5 13.1 year) were redundantly operated due to atypia of undetermined significance in FNA.

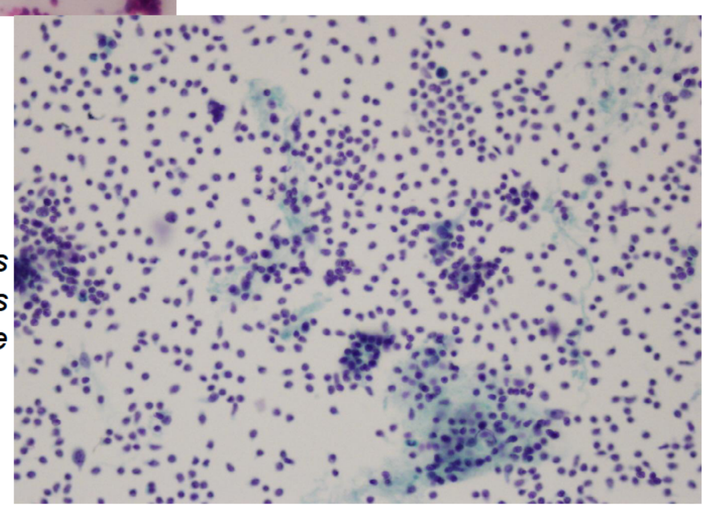
CONCLUSIONS:

Although Hashimoto disease is a benign diagnosis, its misclassification as atypia of undetermined significance in FNA accounts for some false-positive errors. The cytopathologists can frequently be interpreted as atypia of undetermined significance instead of Hashimoto’s thyroiditis. Therefore, result of atypia of undetermined significance in FNA may lead unnecessarily concern among with the endocrinologists.More importantly, our results demonstrated that high papillary thyroid cancer rate was found postoperatively in suspicious nodules evolved background Hashimoto thyroiditis.

Hashimato thyroiditis miscible with Hurthle cell carcinoma or lymphoma and can lead to false positive results. In the study of Amrikach et al 6 patients with cytological diagnosis of papillary carcinoma one of them has been reported as Hashimato thyroiditis. FNA biopsy material are usually hypercellular. Hurtle cells with place to place nuclear cleavage raises doubts of papillary carcinoma. Also a solid nodule containing inflammation can only contain a large number of inflammatory cells in cytology. This case is not sufficient, it is considered to be benign. In this case the minimum number criteria are not applied to follicle cells.



Picture 1: *Hashimoto widespread presence of inflammatory cells in cytology on the ground mixed with thyroiditis*



Picture 2: *Hashimoto's thyroiditis in which cytology oncocytic cells and cellular elements of the germinal center*

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