

MALIGNANCY RATE OF THYROID NODULES FOUND TO HAVE HURTHLE CELLS IN CYTOLOGIC EXAMINATION



Dilek Tüzün¹, Ahmet Dirikoç¹, Neslihan Çuhacı¹, Eren Ersoy², Birol Korukluoğlu³, Gülnur Güler⁴, Reyhan Ersoy¹, Bekir Çakır¹

¹Ataturk Education and Research Hospital, Department of Endocrinology and Metabolism,

²Ataturk Education and Research Hospital Department 3. General Surgery,

²Ataturk Education and Research Hospital Department 2. General Surgery,

³Ataturk Education and Research Hospital Department of 2. Pathology, Ankara, TURKEY

INTRODUCTION

Oncocytic (presence of Hurthle Cell) changes in thyroid follicular epithelial cells might be seen both in benign and malign thyroid lesions.

Our aim in this study is to investigate malignancy rate in nodules that are found to have Hurthle cell after fine needle aspiration biopsy (FNAB) and were operated for various reasons.

MATERIALS AND METHODS

Forty-four patients who has been evaluated in our thyroid diseases clinics between January 2009 and January 2010 and decided to undergo operation were assessed.

These patients were asked to have operation for big nodule size, development in nodule sizes during follow up, compression symptoms or for permanent treatment of hyperthyroidism.

Presence of Hurthle cell was demonstrated in cytological examination of all patients, preoperatively. Thyroid ultrasonography and ultrasound guided FNAB results were recorded. Patients reported to have these FNAB results were excluded. All patients undertake total thyroidectomy.

RESULTS

Thirty-eight of the patients were female and 6 were male. Mean age was 48±12 (19-70) years. Of the patients; 33 had euthyroid multinodular goiter, 6 had euthyroid nodular goiter, 1 had toxic diffuse multinodular goiter, 1 had toxic diffuse nodular goiter and 3 had toxic multinodular goiter.

Thyroid malignancy was detected in 6 (18.2%) patients, postoperatively. Of these, papillary microcarcinoma was determined in 4 and follicular carcinoma in 2.

At least one of the thyroid antibodies was positive in 38% of cases who were found to have benign histopathology and 87.5% of malign cases (p=0.019).

Both in malign and benign group, 25% cases were found to have lymphocytic thyroiditis in histopathological examination.

Table 1. Demographic characteristics of the patients

F/M	38 / 6
Mean Age (year)	48 ± 12
Soliter Nodul/ Multiple Nodul	7 / 37
Euthyroid/ Hyperthyroid	39 / 5
Benign/ Malign (B / M)	38 / 6 (18.2%)
Positive Thyroid antibodies % (B / M)	38.0 / 87.5 (p=0.019)

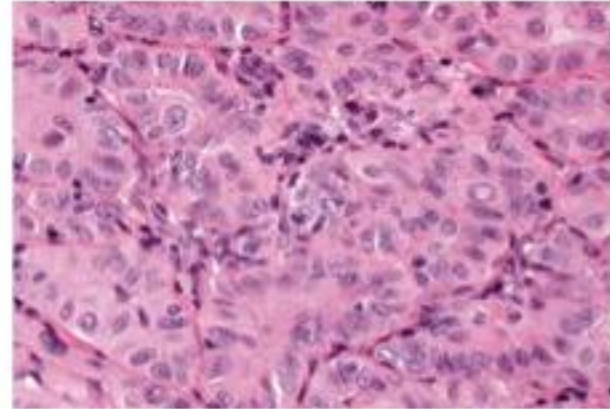


Figure 1. Hurthle cells in papillary carcinoma

CONCLUSION

Hurthle cell changes which can both be seen in benign and malign thyroid diseases might cause some difficulties during histopathological examination. While Hashimoto thyroiditis stands at one side of this spectrum; Hurthle cell adenoma, Hurthle cell carcinoma, oncocytic variant of papillary carcinoma and medullar carcinoma stands at the other side. Therefore, we believe that in case of presence of hurthle cell; possibility of malignancy should be kept in mind even if thyroid antibodies are positive.