



Papiller Tiroid Mikrokarsinomu Nedeniyle Yapılan Tiroidektomiden İki Yıl Sonra Ortaya Çıkan Oftalmopati

Ophtalmopathy Occurence After Two Years Of Thyroidectomy On Account Of Papillary Thyroid Microcarcinoma

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ÖZET

Tiroid oftalmopatisi genellikle Graves Hastalığı'na bağlı görülür. Nodüler guatr veya papiller karsinom nedeniyle yapılan cerrahi sonrasında Graves Hastalığı ve özellikle oftalmopati oldukça nadir olarak bildirilmiştir. Bu yazıda radyoaktif iyot (RAİ) tedavisi veya tiroid stimüle edici hormon reseptör antikor (TSH R Ab) pozitifliği ile birlikte Graves Hastalığı olmayan, papiller tiroid mikrokarsinomu nedeniyle tiroidektomi yapılan ve iki yıl sonra oftalmopati gelişen bir hasta tartışılmıştır. Papiller tiroid kanseri nedeniyle tiroidektomi yapılan hastaların takibinde, RAİ tedavisi almasa bile ve TSH R Ab negatif olsa bile oftalmopati gelişebileceği akılda tutulmalıdır.

Anahtar kelimeler: oftalmopati; tiroid; tiroidektomi

ABSTRACT

Thyroid ophtalmopathy occurs generally due to the Graves' disease. Graves' disease and also ophtalmopathy has been reported rarely after surgery for nodular goiter or papillary carcinoma. In this report we discussed a case of ophtalmopathy which was occurred after two years of thyroidectomy on account of papillary thyroid microcarcinoma although she did not have radioactive iodine therapy (RAI) or thyroid stimulating hormone receptor antibody (TSH R Ab) positive Graves' disease. It should be kept in mind that, during follow-up of thyroidectomised patients with papillary thyroid cancer, ophtalmopathy may be developed, even if not given RAI or negative for TSH R Ab.

Key words: ophtalmopathy, thyroid, thyroidectomy

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Introduction

Thyroid ophthalmopathy occurs generally due to Graves' disease. However, sometimes Hashimoto's thyroiditis can be manifested as ophthalmopathy too. Some orbital autoantibodies were suspected for aetiology, but it is not well understood. Only a few cases were reported about ophthalmopathy in the years following a thyroidectomy and RAI therapy or metastatic papillary thyroid cancer (1,2). In this report we will discuss a case of ophthalmopathy which occurred after two years of thyroidectomy on account of a papillary thyroid microcarcinoma although the patient did not have RAI therapy or TSHRAb positive Graves' disease.

Case

A forty-six-year-old female patient was operated on for the fine needle aspiration biopsy (FNAB) result of a suspicious follicular neoplasia. A total thyroidectomy was performed. Hashimoto thyroiditis in the parenchyma and 7 mm of papillary microcarcinoma in the nodule of the right lobe and Hürthle cell neoplasia was detected at the pathology. Chronic thyroiditis and multinodular goiter were detected with an ultrasound about three years ago. A FNAB was done to the clinically euthyroid patient with normal thyroid function tests. A total thyroidectomy was performed because of the cytological diagnoses of suspicious for a follicular neoplasm. A pathology examination showed a seven millimeter papillary microcarcinoma and Hashimoto thyroiditis in the right lobe and a Hürthle cell neoplasm in the left lobe. There was no thyroid residue or lymphadenomegaly at the postoperative follow-up ultrasonography. There was no known past illness or drug history. Her serum thyroglobulin level was < 0.2 ng/ml with the 175 mcg/day L-thyroxin replacement. At 24 months postoperatively, she had noticed prominence of her eyes, especially the left. The patient was given an eye examination which revealed bilateral exophthalmus (Figure 1.a), the patient had a bilateral eyelid retraction and bilateral vision was normal in

the automatic visual field testing. Measurements by Hertel exophthalmometry were 20 mm in the right eye and 22 mm in the left. Orbital CT scans revealed the thickness of extraocular muscles were in normal limits in both eyes. Both of the central parts of the bulbous oculi muscles were located in the anterior of the interzygomatic line (exophthalmus). Intra and extraconal spaces were open (figure 1.b). Her Clinical Activity Score (3) was 2. Her TSHRAb was 9.46 U/L (in the normal range (0-14 U/L)), anti-TPO and anti-Tg antibodies were high as in the preoperative period (304.5/mL and 134.4 U/ml, respectively) (Table 1). Low levels of focal uptake by the two foci of residual thyroid tissue was detected at the thyroid scintigraphy in the both lobes of the thyroid gland in the neck. Four and 24 hours iodine uptake values were 1.07% and 1.67%, respectively in the Radioactive Iodine Uptake test. Levothyroxine dosage was adjusted according to the TSH values which should be near 0.5 mIU/L. The patient's eye symptoms resolved completely approximately 6 months after.

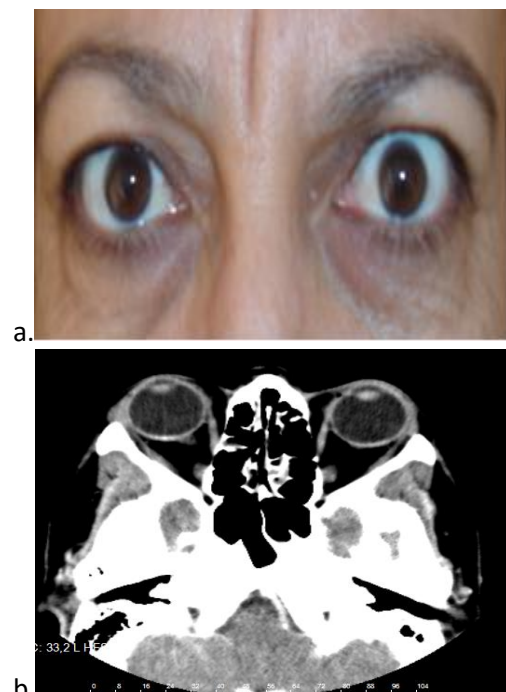


Figure 1. a. Bilaterally exophthalmus and left upper eyelid retraction **b.** Patients Orbital CT findings

Table 1. Patients' preoperative and postoperative thyroid tests

| | Preoperative | Postoperative 3.rd month | Postop. 10.th month | Postop. 24.th month | Postop 27.th month |
|-----------------------|--------------|--------------------------|---------------------|---------------------|--------------------|
| TSH (0,4-4,2 mIU/L) | 1,49 | 0,03 | 0,09 | 0,16 | 0,03 |
| TG (mg/dL) | 7,6 | 0,2 | 0,2 | 0,2 | 0,2 |
| Anti-TG (5-100 IU/mL) | 330 | 194,3 | 101,8 | 153 | 134,4 |
| TSHRab (0-14 U/L) | - | - | - | 9.46 | - |

Abbreviations: TSH: Thyroid stimulating hormone, TG: Thyroglobulin, Anti-TG: Anti Thyroglobulin, TSHRab: Thyroid stimulating hormone receptor antibody

Discussion

In the literature, Graves' disease and also ophthalmopathy has been reported rarely after surgery for nodular goiter or papillary carcinoma (1,2). Kasuga and colleagues reported four cases of Graves' disease after 1680 partial thyroidectomies (2). These reported cases are usually patients with partial thyroidectomy or are patients who have received radioiodine treatment. The authors attributed this situation to the physical and psychological stress due to surgery or anesthesia and antibody leakage during operation. In our case, although there were a pretreatment of Hashimoto's thyroiditis and autoantibody positivity, there was no evidence of eye disease previously. Also, our patient was not treated with radioiodine. We think that, although there is no significant increase of TSHRab level, there could be increases of other autoantibody levels that related thyroid ophthalmopathy. Unfortunately we could not study some candidate autoantibodies such as calsequestrin, eye muscle and collagen XIII antibody (4). In a case, reported by Kamath et al. ophthalmopathy occurred after a long-term thyroxine replacement due to Hashimoto's thyroiditis. They suggested that ophthalmopathy was associated with newly formed Graves' disease (5). Rogers and colleagues reported that metastatic thyroid cancer and ophthalmopathy arose 40 years later in a female patient who was operated on

and received RAI therapy for papillary carcinoma (6). In this patient, no antibody was detected and she was treated with radioiodine (both ophthalmopathy, and metastatic lesions improved). Antonelli et al. reported newly formed ophthalmopathy with TSHRab positivity in patients with nonmetastatic non-residual tissue after four years from the total thyroidectomy and radioiodine treatment for thyroid cancer (7).

In addition to this knowledge, some reports suggested that silent and subacute thyroiditis may be causes of transient thyrotoxicosis (8). But, our patients' clinical and laboratory findings were not compatible with these two situations.

As a result, we did not know certain reason of our euthyroid Graves' ophthalmopathy. However, it should be kept in mind that, during follow-up of thyroidectomised patients with papillary thyroid cancer, ophthalmopathy may be developed, even if not given radioiodine or negative for usual autoantibodies.

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