The association between Papillary Thyroid Carcinoma and Hashimoto's Thyroiditis.

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## Abstract

Hashimoto's thyroiditis (HT) is found in a high proportion of resected thyroid specimens. There has been considerable controversy as to whether having HT predisposes a patient to papillary thyroid cancer (PTC) and conflicting data have been reported with regard to Hashimoto thyroiditis (HT) and risk of malignancy. The aim of this study was to evaluate coexistence of papillary thyroid cancer (PTC) with HT.

Materials and methods: This is a retrospective study done at American Hospital 2 from April 2011 until December 2013. We analyzed the data from 71 patients who underwent thyroid surgery at our institution. Of these, 29 patients were diagnosed with PTC. All patients diagnosed with PTC were evaluated for the presence of HT by measuring thyroid autoantibodies. If a patient had at least one positive thyroid autoantibody, then the patient was defined as having HT.

Results: From a total of 71 patients who underwent thyroid surgery there were 29 patients diagnosed with PTC 3 males (10.3 %) and 26 females (89.7 %), mean age 41.9 (age 18-73) years old. Thyroid antibodies Ac Anti TPO and Ac Anti Thyroglobulin were measured in all patients with PTC. They were positive in six patients with PTC (20.6.8 %). They were all female patients.

Conclusion: These data demonstrate that HT is associated with an increased risk of developing PTC. We also observed a high ratio of females diagnosed with PTC compared with males. An adequate follow up of patients with Hashimoto's thyroiditis may permit an early diagnosis of differentiated thyroid cancer and its appropriate management. More prospective

studies with longer follow-up are needed to further elucidate this relationship. Thus, more aggressive surveillance for PTC may be indicated in patients with HT, especially in women.

Key words: Hashimoto's thyroiditis, papillary thyroid cancer, antibody.