Endocr Pathol (2011) 22:172–173
DOI 10.1007/s12022-011-9171-x

# Comments on "Well-Differentiated Thyroid Carcinoma with Concomitant Hashimoto's Thyroiditis Present with Less Aggressive Clinical Stage and Low Recurrence"

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Published online: 5 July 2011


Dear Editor,

We read with interest the article "Well-Differentiated Thyroid Carcinoma with Concomitant Hashimoto's Thyroiditis Present with Less Aggressive Clinical Stage and Low Recurrence" by Huang et al. [1] because it reinforces our previous results in a smaller Brazilian population of patients with differentiated thyroid carcinoma (DTC) [2]. At the end of a mean follow-up of 8.9±2.2 years, in a retrospective analysis comparing 85 Chinese patients with both papillary thyroid carcinoma (PTC) and Hashimoto's thyroiditis (HT) and 1,708 PTC patients without HT as well as 8 patients with follicular thyroid carcinoma (FTC) and HT and 201 FTC without HT, Huang et al. showed that patients presenting concurrent HT had less aggressive tumors and a better outcome.

Interestingly, only 93 out of 1,997 Chinese patients with DTC, enrolled in the study by Huang et al., presented HT, a percentage of 4.66% of the population of DTC individuals, much lower than the prevalence of hypothyroidism cases or thyroid autoantibodies described in previous studies of the same population [3]. In our cohort, 84 out of 266 (31.58%) DTC patients present concomitant HT, suggesting that a genetic population background may be an important factor in concurrent HT manifestation. Indeed, we recently showed that the inheritance of a G allele of interleukin-10-1082A/G polymorphisms may favor a concurrent autoimmunity in DTC patients [4].

Huang and col. showed that HT was more common among women. In addition, there was a higher percentage of classical PTC in TNM stage IV than in the HT group. In our cohort, the presence of concurrent HT was also significantly correlated with favorable prognostic features including female gender ($p$=0.0274), no extrathyroidal tumor invasion ($p$=0.0028), absence of metastasis at diagnosis ($p$=0.0026), and smaller tumors ($p$=0.0110), confirming the tight relationship between concurrent autoimmunity and histopathological features of lower aggressiveness.

Using the same criteria introduced by Huang et al. to define recurrence, metastasis, and disease-free survival, a log-rank test also confirmed that the absence of HT was more frequent in our patients who had recurrences ($p$=0.0015), suggesting that autoimmune activity against the gland may exert a protective effect on the outcome of DTC patients [2]. In fact, we demonstrated that concurrent HT was accompanied by a mixture of intratumoral lymphocytic infiltration, revealing a putative antitumor immune response.

However, it is worthy to note that Huang and col. demonstrated that even the presence of concomitant HT is not enough to modify the mortality rate of DTC patients, suggesting that an appropriate management of DTC patients is in fact the most important modifiable prognostic factor.

Sincerely,

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