

Anti-thyroglobulin antibodies and risk of finding iodine avid metastases on post-radioactive iodine ablation scan in low-risk thyroid cancer patients

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Dear Editor-in-Chief,

In a recent article published in the Journal of Endocrinological Investigation, Nabhan et al. [1] compared the frequency of metastases detected by post-therapy whole-body scanning (RxWBS) among low-risk patients (T1–2, discrete cN0pN1a) with versus without anti-thyroglobulin antibodies (TgAb). In previous studies involving low-risk patients with unstimulated postoperative thyroglobulin (Tg) ≤ 0.2 ng/ml or stimulated Tg ≤ 1 ng/ml, metastases were detected by RxWBS in $<1\%$ [2, 3]. In the series of Nabhan et al. [1], this frequency was 8% in the group without TgAb (group B). Based on the correlation between Tg concentrations before ablation and the frequency of ectopic uptake on RxWBS, we believe that the higher frequency found in that study is due to the fact that the patients had on average unstimulated Tg of 1.1 ng/ml and stimulated Tg of 15 ng/ml [1]. In patients with TgAb (group A), RxWBS was positive for metastases in 14% [1].

Patients with TgAb are almost always Tg negative. We, therefore, believe that for the purpose of that study and to reach the conclusion reported by the authors [1], the most adequate comparison would be between patients with TgAb (and Tg negative) versus without TgAb but also Tg negative. Considering the data of previous studies [2, 3] and the Tg concentrations reported for group B in the series of Nabhan et al. [1], we believe that the frequency of persistent disease on RxWBS in the latter does not apply

to low-risk patients with negative Tg. Thus, if the evaluation would have involved only patients with negative Tg, comparing those with versus without TgAb, it is likely that the study would have shown a higher prevalence of metastases on RxWBS in patients with TgAb and the conclusion would be different from that reached by the authors. In fact, in the proposal of ablation based on postoperative assessment, one of the indications is the presence of TgAb [2].

Compliance with ethical standards

Conflict of interest The author declares that he has no conflict of interest or funding.

Ethical approval This article does not contain any studies with human participants or animals performed by any of the authors.

Informed consent No informed consent.

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