

Adaptation of ATA-differentiated thyroid cancer guidelines based on the recommendations of the PSNM task force

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ABSTRACT

The 2015 American Thyroid Association guidelines for the management of differentiated thyroid cancer are very comprehensive and evidence based. However, they essentially represent the North American perspective of disease management. Although most of the recommendations are applicable in the Pakistani scenario, some of them are unsuited to the local conditions and may be required to be modified. A critical review of the guidelines has been undertaken by the thyroid focus group of the Pakistan Society of Nuclear Medicine and the findings have been presented in this article.

Keywords: Differentiated thyroid cancer, DTC, management guidelines.

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The new guidelines from the American Thyroid Association (ATA) for the management of differentiated thyroid cancer (DTC) are a monumental accomplishment [1]. The authors of this evidence-based document provide 101 clearly written recommendations, giving the strength of recommendation and the quality of evidence [1]. Even though most of the text appears to be quite practical and represents a significant progress from the guidelines published earlier, the guidelines are entirely based on a US/ North American perspective and cannot be unequivocally relied upon by physicians in Pakistan, with entirely different socioeconomic conditions and cultural norms. The thyroid focus group of the Pakistan Society of Nuclear Medicine (PSNM) has been tasked to review the ATA guidelines and to provide suggestions to suit the local conditions, based on local data and conditions. The PSNM thyroid focus group represents nuclear physicians who manage almost all the thyroid cancer patients in Pakistan. The supporting data regarding the thyroid cancer patients have been published by the Pakistan Atomic Energy Commission in its cancer registry data publication [2].

The first suggestion of the focus group concerns the ATA recommendation number 2 (B) vis-à-vis the role of the thyroid scan. Iodine-123 is not available in Pakistan, however, ^{99m}Tc-pertechnetate is widely available and has been established by earlier guidelines as being of equal (or even superior) diagnostic value [3,4]. Therefore, it is the recommendation of the focus group that ^{99m}Tc-pertechnetate may be employed with complete confidence. This is especially important in the local setting as the scans are in

the domain of the nuclear physicians, easily accessible to the patients, and a lot of epidemiological data is based on the patterns noted on thyroid scan [5].

The second suggestion of the focus group concerns the ATA recommendation number 2 (C) stating that if the TSH is normal or raised, a thyroid scan need not be performed. Pakistan is an iodine-deficient country [6]. In such a population, a normal TSH level cannot rule out thyroid nodule autonomy [7]. Furthermore, as little as 15% of solitary nodules may be malignant [8]. Therefore, the use of ^{99m}Tc-pertechnetate to guide in carrying out a fine-needle aspiration cytology only in scintigraphically cold nodules may help in reducing the number of unnecessary procedures [9,10].

The third point where the focus group differed with the ATA was regarding the recommendation number 35 (B), whereby the ATA recommends that even a lobectomy may be sufficient for tumours that range between 1 and 4 cm. These patients will then be unable to receive Iodine-131 therapy. The number of surgeons who have the requisite expertise in Pakistan is very limited, and also there is a high risk of patients being lost to follow-up. Hence, all patients of DTC, even the low-risk ones, should undergo a near-total thyroidectomy and that remnant ablation be carried out with Iodine-131. The focus group feels that till date most of the literature suggests that even low-risk DTC patients benefit from remnant ablation [11].

The fourth point of difference with ATA was recommendation 51 (D), whereby the ATA guidelines suggest that in patients with intermediate-risk papillary DTC,

Iodine-131 ablation is to be considered and definitely not recommended. However, there is evidence in the literature that remanent ablation improves the overall survival in such patients [12]. The focus group believes that adjuvant therapy should be definitely carried out as logistics and local customs dictate that many such patients may be lost to follow-up.

It is hoped that this work will initiate more debates regarding the Pakistan-centric recommendations and the ultimate development of PSNM-led guidelines for the management of thyroid disorders, especially DTC. The taskforce is a permanent one, so further recommendations, if any, will be published in the future, till a formal set of guidelines are prepared and published.

Conflict of interest

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