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Differences Between Latin American and American Associations' Thyroid Cancer Guidelines

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The recommendations of the Latin American Thyroid Society (LATS) on differentiated thyroid cancer diagnosis and management were published (1) at almost the same time as the American Thyroid Association (ATA) published their revised guidelines on thyroid cancer (2). Although we endorse the ATA guidelines, there are some differences between the two societies' positions concerning surgical approach, risk stratification, and other issues that deserve brief comment. Our consensus reflects the heterogeneity of different countries with regard to health care resources and our experience adapting to them. For this reason, we assembled experts from Brazil (Celso Friguglietti, Laura S. Ward, Rosalinda R. Camargo, Mario Vaisman, and Eduardo Tomimori); Argentina (Fabian Pitoia, Hugo Niepomniszcz, Rubén Harach, and Alicia Gauna); Chile (Fernando Munizaga and Nelson Wolk); and Peru (Sandro Corigliano and Eduardo Pretell) who, thanks to support from LATS President (Hans Graf) and President-Elect (Marcos Abalovich), produced a first draft based on evidence and the expert opinion on how it could be implemented in different countries. The final consensus was written after this draft circulated among LATS associates who sent many suggestions that were incorporated into the final manuscript.

The main divergent points between the LATS and ATA guidelines are as follows. While LATS recommends total thyroidectomy for treating all differentiated thyroid carcinomas independent of their size, ATA suggests that a simple lobectomy may be sufficient for treating unifocal intrathyroidal papillary thyroid tumors smaller than 1 cm at their largest diameter (microcarcinomas). The LATS panel considered that, although some patients may be overtreated, total thyroidectomy precedes an adequate follow-up by allowing reliable thyroglobulin (Tg) measurements. In many Latin American countries, a proper follow-up may not be possible without reliable Tg measurements, since serial ultrasonography implies professionals specializing in imaging, still not available everywhere. Lobectomy should be considered sufficient only when a retrospective diagnosis of microcarcinoma is made after surgical treatment for other disorders of the thyroid gland.

Another important difference concerning surgical treatment is the indication of lobectomy in some particular cases, such as with patients with low adherence to a treatment plan or those who live far away from medical centers, who may not return for regular follow-up. These circumstances are very characteristic of some specific regions of Latin America. The panel considered that, in such situations, the risk of death or recurrence of thyroid tumor might be lower than the burden and the risks of a chronic hypothyroid state.

LATS and ATA also differ regarding postsurgical risk stratification, although guidelines from both groups are based on American Joint Committee on Cancer/Union Internationale Contre le Cancer TNM staging. LATS consensus considers three main groups of patients: very low, low, and high risk, whereas the ATA revised guidelines define low, intermediate, and high-risk patients. The LATS panel considers tumors with microscopic invasion into the perithyroidal soft tissues, cervical node metastasis, and tumors with aggressive histology (the intermediate-risk patients in the ATA guidelines) as belonging to the high-risk group, since these patients may present recurrences (3–5).

Regarding radioiodine remnant ablation, there is a substantial difference between the guidelines. The ATA recommends remnant ablation only for high-risk patients; even patients with multifocal microcarcinomas are not supposed to receive remnant ablation, according to the ATA guidelines. The LATS panel also recommends remnant ablation for all high-risk patients but considers that the procedure might also benefit some low-risk patients; it is not mandatory for patients categorized as very low-risk. We leave the decision to physician, who should also take into account their own experience and the access to the proper facilities in their region (1).

Only a brief consideration is given to the predictive value of pre-ablation stimulated thyroglobulin (Tg) levels in the ATA guidelines. The LATS panel considers that this first serum stimulated Tg determination after surgery is a good prognostic factor of persistent disease and should always be measured.

Considering thyroid hormone replacement or suppressive therapy, the main difference between the guidelines involves low-risk patients. LATS divided these patients into two groups: very low risk, in whom serum thyrotropin (TSH) levels are maintained in the normal range, and low risk, in whom serum TSH is maintained between 0.4 and 1 mU/L. ATA recommends the serum TSH be kept between 0.1 and 0.5 mU/L in low-risk patients.

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Some other points of departure include the use of external beam therapy as initial treatment of aggressive thyroid tumors, which the LATS panel did not consider, and the very important indications on the use of 2-deoxy-2[^{18}F]fluoro-D-glucose positron emission tomography (^{18}FDG-PET). ATA guidelines indicate ^{18}FDG-PET, not only in patients with advanced disease who usually have an elevated Tg level (higher than 10 ng/mL) and negative post-dose whole-body scan, but also in several other situations, including the initial staging of aggressive tumors and the identification of patients who are unlikely to respond to radioiodine therapy. Unfortunately, most Latin American countries do not have easy access to the use of ^{18}FDG-PET, which restricts our use to only patients with elevated serum Tg levels (higher than 10 ng/mL) and negative post-dose whole-body scan. In addition, we believe that economic issues will prevent the generalized use of recombinant human TSH, whether for remnant ablation or for the follow-up of thyroid cancer patients in most Latin American countries.

In conclusion, the main differences between ATA and LATS guidelines are the surgical approach in some patients, radioiodine ablation in low-risk patients, and the limited use of expensive strategies, including the routine use of recombinant human TSH and ^{18}FDG-PET.

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Response to Pitoia and Ward

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On behalf of the American Thyroid Association (ATA) Thyroid Nodule and Thyroid Cancer Guidelines Task Force, I thank Drs. Pitoia and Ward for their interesting and insightful commentary about the differences between the Latin American Thyroid Society and ATA guidelines. It was encouraging to me to see that the similarities between the two documents far outnumber the differences. However, there are differences in many aspects of clinical care. I will not address each of the differences that are enumerated by Drs. Pitoia and Ward, but I think this is a good example of how high quality guidelines must be written to reflect not only "the evidence," but also patient preferences and the economic realities that are present in the society. Furthermore, the differences between the two sets of guidelines show that when reasonable people make recommendations using data that are incomplete or imperfect there are bound to be minor disagreements. However, I am very heartened by the preponderance of similarities and hope that future research will help to resolve some of the variations in practice and lead to better care for all of our patients, North, South, East, and West.

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