Nodules ≤ 1 cm with Highly Suspicious Ultrasound Features and Papillary Microcarcinoma of the Thyroid: Is Fine-Needle Aspiration Cytology Necessary before Deciding on Active Surveillance?

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Dear Editor,

Recently, Russ et al. [1] endorsed active surveillance for low-risk papillary microcarcinoma of the thyroid (PMT). It is also reasonable to imagine that, if immediate treatment is not necessary, fine-needle aspiration (FNA) of corresponding nodules ≤ 1 cm could be postponed until therapy is considered. This is the recommendation of the European Thyroid Association (ETA) [1] and American Thyroid Association (ATA) [2].

Although I agree that active surveillance is an option for low-risk PMT, I believe that FNA should precede this decision. At our institution, nodules with highly suspicious features on ultrasonography (US) are always submitted to FNA (irrespective of size) and the latter is repeated when cytology is commenced [3, 4]. We revised 181 patients with 198 nodules ≤ 1 cm that were highly suspicious and apparently restricted to the thyroid on US [5]. The

initial cytology was benign in 76 nodules (38.4%), in which the repetition of FNA confirmed the benign nature in 59 (29.8%). Thus, FNA changed the “presumptive” diagnosis of PMT in 30% of the nodules [5].

For nodules ≤ 1 cm with highly suspicious US features and not submitted to FNA, Russ et al. [1] recommend regular US scanning. In fact, this is the protocol adopted by the centers with the largest experience in active surveillance of PMT. In contrast, for nodules submitted to FNA and with a benign cytology, the ATA and ETA recommend the repetition of FNA [1, 2] but follow-up with US is no longer necessary after 2 benign cytology results [2]. Since the recommendation is general [2], there is more reason to assume that it applies to nodules ≤ 1 cm. In addition to this relevant difference in follow-up, with the omission of FNA, a significant proportion of patients (about 30% in our series)

would be unnecessarily and equivocally submitted to the psychological stress of having a presumptive diagnosis of “cancer” or of a “nodule with a high probability of cancer.”

In my opinion, the consequences cited above, together with the fact that FNA is a widely available, low-cost, and safe procedure, favor its use before deciding on the active surveillance of nodules ≤ 1 cm with highly suspicious US features that are sporadic and apparently restricted to the thyroid. Although rare, FNA may detect uncommon tumors (such as medullary carcinoma or aggressive variants of papillary thyroid cancer) that are not candidates for active surveillance [2].

Disclosure Statement

No competing financial interests exist.

References

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