Thyroid FNA in the Time of Coronavirus: The Interventional Cytopathologist Point of View

As cytopathologists who run a fine-needle aspiration (FNA) clinic, performing not only freehand sampling of palpable thyroid nodules but also ultrasound-guided aspiration of subclinical lesions, we read with great interest the article by Rossi et al,² in which they remark on the need to postpone nonessential cases to reduce the exposure of professional staff to potential COVID-19 transmission.

At our institution, before the outbreak of the COVID-19 pandemic, FNA was considered routine in the initial screening of patients with thyroid nodules. However, because most thyroid nodules are low risk and even malignant ones can be safely managed with a delay in surgical treatment, it is reasonable that during the COVID-19 infection outbreak, most thyroid FNAs can be safely deferred.

This is also our policy. During the first 3 weeks of the national Italian lockdown, the number of thyroid FNAs was greatly reduced in comparison with the same period last year (P < .001) as it dropped from 229 to 12.³

Thyroid FNA clinics are revisiting their organization and practices, and in turn, the cytopathologist's role needs to be reshaped. In this setting, thyroid FNA cannot be considered routine anymore because all fresh cytological specimens may contain viable and, therefore, transmissible virus and should be considered potentially infectious.² Indeed, hospital management is recommending limiting, as much as possible, outpatient visits and rescheduling clinic appointments that are not urgent, such as appointments for thyroid FNA.4

At our institution, when patients are referred to our clinic by endocrinologists of intramural departments, triaging of each patient based on 1) nodule location, 2) ultrasound features, 3) laboratory data (in particular serum calcitonin levels), and 4) a consultation with a surgeon who manages thyroid disease is routinely performed to identify those patients who should undergo thyroid FNA even during this critical period.

Because our clinic is also dedicated to outpatients, cytopathologists need to take a more proactive role and ask the patients who directly contact our service for relevant medical documentation, including ultrasound examinations, in order to prioritize them on the basis of the most recent guidelines for the execution of thyroid FNA and to exclude patients with fevers or other virusrelated symptoms.

We expect to resume elective FNA procedures after the outbreak when the basic reproduction number will be <1 and, hopefully, this procedure will be less risky. Because the basic reproduction number seems to be reduced as the air temperature and relative humidity increase, we hope that the warm spring weather of South Italy will be a valuable ally.6

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REFERENCES

- 1. Bellevicine C, Vigliar E, Malapelle U, et al. Cytopathologists can reliably perform ultrasound-guided thyroid fine needle aspiration: a 1-year audit on 3715 consecutive cases. Cytopathology. 2016;27:115-121.
- 2. Rossi ED, Fadda G, Mule A, Zannoni GF, Rindi G. Cytologic and histologic samples from patients infected by the novel coronavirus 2019 SARS-CoV-2: an Italian institutional experience focusing on biosafety procedures. Cancer Cytopathol. 2020;128.
- 3. Vigliar E, Iaccarino A, Bruzzese D, Malapelle U, Bellevicine C, Troncone G. Cytology in the time of coronavirus disease (COVID-19): an Italian perspective. J Clin Pathol. Published online April 20, 2020. doi:10.1136/ jclinpath-2020-206614
- 4. Li M, Marquez RC, Vinales KL, et al. Considerations for thyroid fine needle aspiration (FNA) biopsies during the COVID-19 pandemic. Clin Thyroidol. 2020;32:156-158.
- 5. Haugen BR, Alexander EK, Bible KC, et al. 2015 American Thyroid Association management guidelines for adult patients with thyroid nodules and differentiated thyroid cancer: the American Thyroid Association Guidelines Task Force on Thyroid Nodules and Differentiated Thyroid Cancer. Thyroid. 2016;26:1-133.
- 6. Distante C, Piscitelli P, Miani A. COVID-19 outbreak progression in Italian regions: approaching the peak by the end of March in Northern Italy and first week of April in Southern Italy. Int J Environ Res Public Health. 2020;17:3025-3039.

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