

A vignette epexegesis of a model for training sonography-guided fine-needle aspirations in thyroidology and thyroidologists: think twice with needle size?

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Dear Editor,

Mater artium necessitas. A Deucalione (Necessity is the mother of invention. Since Deucalione), thyroid gland disorders with their diagnostic options remain their significance in tellurian. Today, thyroidology, *per se*, deals with up-to-date management of nodular thyroid disease demanding the availability of several diagnostic and therapeutic modalities in order to obtain a correct diagnosis and recommend appropriate treatment options.

We read with a great deal and respect the research article entitled “A model for training ultrasound-guided fine-needle punctures”. This beneficial research of high quality seems to demand determining in order to evaluate the efficacy of a training program in sonography-guided fine-needle aspiration (FNA) using a cost-effective model¹. Luz et al.¹ declared in their study published in the 68th volume of *Rev Assoc Med Bras* that no difference had been detected between the two groups of residents, resident physicians from the first year of the course (R1) *vs.* those from the second year of the course (R2), in the time required to perform the procedure before or after the FNA training course. Conversely, the authors reported that the posttraining punctures performed were significantly lower than pretraining ones numerically, regardless of the group of residents, R1 *vs.* R2. In addition, they also stated that the resident physicians’ evaluation of the course was positive and that no significant difference between them in their answers to the questionnaire of Q1 to Q6 had been recognized. Nevertheless, the optimal needle size has not been established distinctly and conclusively in thyroidology for an optimal and accurate evaluation of thyroid FNA cytology till now. An indisputable accuracy of needle size has not been declared globally for thyroidologists.

Of note, the debate is still ongoing on this controversial issue utilizing a broad range, from 21 to 27 gauges, of needle

sizes²⁻⁴. Luz et al.¹ emphasized using a 25-gauge needle, without the puncture guide, in their good work. However, the aforementioned size has been known as not much “finer” and also a “larger” one²⁻⁴. Therefore, would the outcomes of the study in three key points: (i) time to perform the procedure, (ii) the number of punctures on the matrix surface, (iii) answers to the questionnaire of Q1 to Q6, be altered as they had harnessed significantly (i) finer or (ii) larger needle sizes? Of note, does utilizing a unique size affect the evaluations of the relevant parameters of the mentioned study? As such, is it essential to compare at least two, 21 *vs.* 27 gauges, even three, 21, 25, and 27 gauges, or more in order to design this kind of deducing educational and technical study?⁵⁻¹⁰ Finally, would the outcomes might switch in case of utilizing the capillary sampling technique instead of their used terminology of “puncturing” and in case of comparison of both interventional applications in their study?

To resolve these issues, working with finer and larger sizes, even comparing at least three sizes to each other, which would give shed light on it, might be opted for by thyroidologists. As a matter of fact, this issue merits further investigation. We thank Luz et al.¹ for their valuable study.

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AUTHORS’ CONTRIBUTIONS

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