

## Fine-Needle Aspiration Cytology—A Timely Comment

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**Editors' Introduction.** In this invited editorial, Dr. Wikland and Dr. Sandberg give their scientifically-founded, emphatic answer to a question that burns today in the minds of countless clinicians and patients. The doctors' answer casts more light onto the imprudence of conventional medicine's continuing advocacy of the TSH as its first-line diagnostic approach to hypothyroidism. (See Jackie Yellin's editorial on this subject: *The Common Thread: What the New Research Shows*, Thyroid Science 3(3):E1-2, 2008.)

We at Thyroid Science emphatically agree with Dr. Wikland and Dr. Sandberg. Because of that, we appeal to all practicing clinicians concerned with identifying and caring for hypothyroid patients to heed the doctors' answer.

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Very recently, a “Comment” on fine-needle aspiration (FNA) appeared in *The Lancet*.<sup>[1]</sup> The authors cite that “the method has been endorsed by medical societies as the initial diagnostic tool for thyroid nodules.”<sup>[2]</sup>

The authors underscore the robust and simple nature of the procedure, and point out that FNA is ideally suited for use even in primitive settings. (They report on FNA successfully carried out in a hotel room.) We have a long experience of FNA applied to the thyroid, with special reference to the assessment of autoimmune lesions of the gland.<sup>[3][4]</sup>

Conventionally, the diagnostic work-up of suspected hypothyroidism relies on biochemical (TSH) and, to a lesser extent, on serological (thyroid antibody) evidence of autoimmune assault on the gland. The TSH analysis enjoys the position of being considered the most important diagnostic test for primary hypothyroidism. The conventional claim is that this condition can be confidently excluded with the presence of a “normal” TSH.

What, then, is a “normal” TSH? Over the years, we have witnessed a consistent downward shift of the upper limit of “normal.” Yet the status of the TSH analysis as the crucial reference test remains largely unquestioned. Is this reverence justified? Should a diagnosis of hypothyroidism be restricted exclusively to patients fulfilling current biochemical criteria?

Even the slightest whiff of doubt of the unerring quality of the TSH analysis is a rare finding in the big mainstream medical journals. However, when

discussing clinical problems with colleagues around the world, we are repeatedly confronted with “the burning question”—does a “normal” TSH reliably and convincingly exclude a condition of symptomatic thyroid autoimmunity?

Our answer to this question is—*no!* There is an unequivocal consensus that autoimmunity is the chief cause of thyroid problems in the northern hemisphere. Hence, evidence on a cellular/cytological level confirming this condition is extremely important. This is where FNA enables us to widen our insight of the true prevalence of thyroid autoimmunity.

The comment<sup>[1]</sup> draws attention to some aspects of the virtues of FNA (namely its superior role in the investigation of thyroid nodules) and the relatively straightforward and simple nature of the procedure. We agree, and we would like to add its considerable potential in shedding light on the looming iceberg of (symptomatic) thyroid autoimmunity.

### References

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