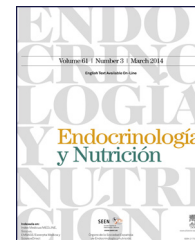


ENDOCRINOLOGÍA Y NUTRICIÓN

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LETTERS TO THE EDITOR

Diagnostic and functional structure of a high-resolution thyroid nodule clinic: An efficiency model[☆]



Estructura diagnóstica y funcional de una consulta de alta resolución de nódulo tiroideo: un modelo de eficiencia económica

Sir,

We have read with interest the article published by Fernández-García et al.¹ on the diagnostic and functional structure of a high-resolution thyroid nodule clinic. We undoubtedly share with them many points of view, but there are some controversial considerations we need to emphasize.

A high-resolution clinic is defined as one that includes in one and the same care action of all examinations needed for diagnosis and treatment of a given condition.^{2,3} The ultimate and primary goal is to improve system efficiency, reducing the number of patient visits, avoiding delays in tests and appointments for subsequent visits, and increasing satisfaction perceived by patients.^{4,5} To sum up, if this scheme is followed, a high-resolution clinic is characterized as synonymous with a single act clinic.

Although authors themselves recognize that there are many possible models of high-resolution thyroid nodule clinic, only one meets all of the abovementioned requirements: a clinic where the endocrinologist him/herself is qualified and responsible for ultrasound-guided fine needle aspiration (FNA) of the thyroid gland and true director of the whole thyroid nodule diagnostic algorithm by integrating clinical, laboratory, ultrasonographic, and cytological data.

As in other fields in our specialty, endocrinology has implemented single act clinics late as compared to other areas of medicine. High-resolution cardiological clinics, widely implemented throughout Spain with proven positive and efficient results, are a good example of this.⁶ As

cardiologists themselves recognize, the privilege of being able to perform within the same specialty most supplemental tests needed for patient work-up (electrocardiogram, echocardiogram, ergometry, amongst others) allows for implementing high-resolution clinics ensuring maximum effectiveness, and avoiding the potential influence of the complex coordination with other departments.⁷ Obviously, the functional structure of a high-resolution thyroid nodule clinic should not be different from this organization system. For this, endocrinologists should be qualified not only for clinical and hormonal assessment, but also for ultrasound examination of the neck and ultrasound-guided FNA, delaying cytological examination by the pathologist. Time and staff investment and coordination required when at least three specialists (endocrinologist, radiologist, and pathologist) work in the same physical environment of a high-resolution thyroid nodule clinic significantly impair efficiency of the system. Strictly speaking, this reduces the high-resolution clinic to three coordinated conventional outpatient clinics.

Performance of ultrasonography and ultrasound-guided FNA by the endocrinologist undoubtedly requires theoretical and technical training with a progressive learning curve, especially sensitive as regards the proportion of punctures inadequate for diagnosis. However, once the procedure has been mastered, many studies have shown results similar to those achieved by other specialties.^{8,9} Adequate communication with the radiodiagnosis and pathology department is also indispensable, as they may provide support to the high-resolution thyroid nodule clinic, especially in doubtful cases.

On the other hand, the role of the high-resolution thyroid nodule clinic should not be limited to initial or cytological diagnosis, as if the clinic was limited to FNA as a simple isolated technical procedure. This clinic should also play an essential role in thyroid nodule monitoring, allowing for integration by the endocrinologist of all clinical, cytological, and ultrasonographic data in a single act clinic, and thus ensuring efficiency. In this regard, primary care involvement in long-term patient monitoring is essential, especially based on studies recently reported on re-evaluation of thyroid nodules with prior benign cytology.¹⁰ Similarly, referral criteria should be agreed and known by specialties with an interest in high-resolution thyroid nodule clinic, and specially by primary care, in order to minimize the risk of high-visit frequency and referral of trivial clinical problems attributed to this type of high-resolution clinics.¹¹

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To sum up, it is true that each department must adapt organization of the high-resolution thyroid nodule clinic to its particular situation and available means. In our view, however, a high-resolution thyroid nodule clinic only achieves maximum efficiency and autonomy in the hands of endocrinologists qualified to perform the clinical assessment and ultrasonographic procedures needed for a complete work-up. Training in thyroid ultrasonography and FNA of all interested endocrinologists and residents in endocrinology is therefore desirable, as is a clear positioning of the Spanish Society of Endocrinology and Nutrition in the defense of this training, which is increasingly needed in our field.

We think that endocrinologists are the main actors qualified to integrate all data needed for thyroid nodule diagnosis and monitoring, and not as a simple technician, but as a true protagonist able to efficiently tackle a disease whose prevalence overflows the conventional diagnostic channels.

Conflicts of interest

The authors state that they have no conflicts of interest.

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Reply to: Diagnostic and functional structure of a high-resolution thyroid nodule clinic: An efficiency model[☆]



Respuesta a: Estructura diagnóstica y funcional de una consulta de alta resolución tiroidea: un modelo de eficiencia económica

We have carefully read the letter by Díaz-Soto et al.¹ containing reflections related to our paper, recently published in *Endocrinología y Nutrición*, regarding the ideal structure

of a high-resolution thyroid nodule clinic.² As the people responsible for the thyroid nodule clinic on which most of these observations are focused, we would like to make some clarifications.

First of all, Díaz-Soto et al. state that the only model of clinic that meets the requirements for a high-resolution clinic is a clinic where the endocrinologist performs ultrasonography and fine needle aspiration (FNA), thereby dismissing other plausible options. To support their statement, they use the following definition of a high-resolution clinic: "a clinic that includes in the same care action the performance of examinations required for the diagnosis and treatment of a given condition. The ultimate and primary goal is to improve system efficiency by decreasing the number of patient visits, avoiding delays in tests and appointments for subsequent visits, and increasing the satisfaction perceived by patients". Based on this scheme, we see no objective reason for considering any of the models of single action clinic cited in our recent review as less valid options.

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