Annales d'Endocrinologie 83 (2022) 375–377

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SFE-AFCE-SFMN 2022 consensus on the management of thyroid nodules

SFE-AFCE-SFMN 2022 Consensus on the management of thyroid nodules: Introduction to the consensus☆

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ARTICLE INFO

Keywords:
Thyroid nodule
Management
Methodology
Consensus overview

ABSTRACT

The SFE-AFCE-SFMN 2022 consensus deals with the management of thyroid nodules, a condition that is a frequent reason for consultation in endocrinology. In more than 90% of cases, patients are euthyroid, with benign non-progressive nodules that do not warrant specific treatment. The clinician's objective is to detect malignant thyroid nodules at risk of recurrence and death, toxic nodules responsible for hyperthyroidism or compressive nodules warranting treatment. The diagnosis and treatment of thyroid nodules requires close collaboration between endocrinologists, nuclear medicine physicians and surgeons, but also involves other specialists. Therefore, this consensus statement was established jointly by 3 societies: the French Society of Endocrinology (SFE), French Association of Endocrine Surgery (AFCE) and French Society of Nuclear Medicine (SFMN); the various working groups included experts from other specialties (pathologists, radiologists, pediatricians, biologists, etc.). This introductory text explains the reasons for this choice and the methodology used, and gives an overview of the current consensus on the management of the thyroid.

1. Why this choice?

1.1. Recent developments

Since the last recommendations produced by the SFE in 2011, concrete progress has been made in the exploration, preoperative diagnosis and treatment of thyroid nodules [1]. The 2015 American Thyroid Association (ATA) guidelines did not incorporate the most recent advances [2]. The current strategy is based on a personalized approach adapted to the patient, taking into account the risks generated by the nodule and the quality of life. It gives a predominant place to ultrasound and cytology. It relies on new tools, particularly nuclear medicine and molecular biology, with interesting prospects, the indications for which must be determined. We are also witnessing an evolution in surgical indications and techniques and the emergence of alternative approaches, whether it be active surveillance or management by thermal ablation. The follow-up of non-operated or benign forms is poorly codified and must integrate the recent modifications of the WHO classification, with the description of low-grade tumors such as *non-invasive follicular thyroid neoplasm with papillary-like nuclear features* (NIFTP), which are no longer considered malignant. The management of forms in children and pregnant women needs to be clarified [3].

These many recent advances imply a need to update the recommendations by integrating new diagnostic and therapeutic approaches.

1.2. A public health issue

As detailed in the section on epidemiology, the vast majority of thyroid nodules are benign and the major challenge in their management is to make the differential diagnosis between benign and

☆ The list of participants in the SFE-AFCE-SFMN 2022 consensus on the management of thyroid nodules is given at the end of the text.

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https://doi.org/10.1016/j.ando.2022.10.002
0003-4266/

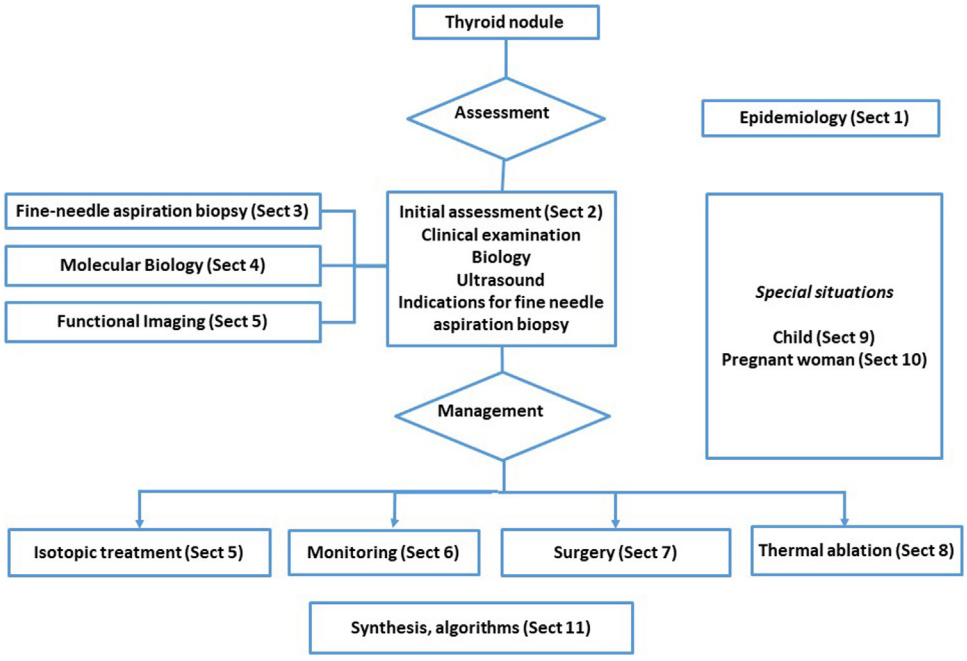

Fig. 1. Overview of the consensus on the management of the thyroid nodule.

malignant nodules. However, the clinician's aim should not be to detect all thyroid cancers, but only those that carry a high risk of recurrence or death and those that occur in patients at risk of cancer: "over-detection" of thyroid microcancers leads to treatments with unfavorable risk-benefit tradeoff [2,4]. This is a public health problem that can lead to complications and impaired quality of life for the patient, and to significant additional costs for society. Appropriate management must avoid over-diagnosis and unnecessary treatment. Conversely, it is very important in these nodules to know how to recognize certain cancers with poor prognosis, which should be treated as a matter of urgency. The importance of an adapted care pathway involving general practitioners and also the patient in the framework of joint decision-making must be emphasized.

Table 1
Rating of recommendations.

Grade		Level of evidence	
A	Strong recommendation	++++	Very high quality evidence: randomized prospective trials
B	Weak recommendation	+++	High quality evidence: prospective studies or large cohorts
C	Neutral (neither for nor against)	++	Medium quality evidence: retrospective studies, registries
		+	Low quality evidence: clinical cases
		Expert opinion	No scientific data

2. Methodology

The consensus covers all stages of the diagnostic and therapeutic management of a thyroid nodule, including follow-up (Fig. 1).

The aim is to provide a document that incorporates recent advances and answers the practical questions of practitioners. To achieve this, more than 60 experts from different specialties (list at end of text) were involved, divided into 10 working groups led by a coordinator and including representatives of the 3 Societies promoting the consensus.

Each group was tasked with producing a bibliographic update of the main PubMed-indexed articles published since 2010 (date of the last French consensus) and producing recommendations, the ratings of which are detailed in Table 1.

After a face-to-face meeting on October 15th, 2021 at the Le Havre SFE congress, virtual meetings involving all the experts participating in the working groups were organized on January 27, and then on April 1 and 8, May 20 and June 30, 2022, to produce a general summary of the texts and recommendations. The text was circulated to all SFE members via the website and to other partner societies (SFMN endocrinology working group, AFCE members) and to some previously designated experts, for criticism, comments and suggestions. A final meeting of the coordinators allowed the texts to be finalized after incorporating the comments of the reviewers.

This consensus under the triple aegis of the SFE-AFCE-SFMN was presented on October 15th, 2022 at the SFE Congress in Nantes and then published in the Annals of Endocrinology.

3. List of participants in the SFE-AFCE-SFMN 2022 consensus on the management of thyroid nodules

Coordinators: F. Borson-Chazot (SFE), C. Lussey-Lepoutre (SFMN), F. Pattou (AFCE).

Participants: Endocrinologists: F. Albarel, A. Ben Hamou, F. Borson-Chazot, C. Briet, C. Buffet, B. Corvilain, T. Cuny, C. Do Cao, D. Drui, E. Ghanassia, L. Groussin, S. Grunenwald, M. Haissaguerre, M. Ladsous, L. Lamartina, H. Lasolle, S. Leboulleux, E. Lecornet Sokol, L Leenhardt, A Lugat, P. Thuillier; Nuclear medicine physicians: C. Ansquer, S Bardet, D. Benisvy, C. Lussey-Lepoutre, D. Taieb; Surgeons: C. Avisse, G. Baud, F. Bihain, J.P. Bizard, L. Brunaud, R. Caiazzo, N. Chereau, N. Christou, P.A. Colas, S. Deguelte, C. de Ponthaud, G. Deroide, S. Di Maria, G. Donatini, S. Frey, S. Gaujoux, J. Gharios, G. Godiris-Petit, P. Goudet, C. Guérin, A. Hamy, D. Hartl, A. Hasani, J.C. Lifante, C. Marciniak, M. Mathonnet, F. Menegaux, E. Mirallié, H. Najah, C. Nomine-Criqui, S. Noullet, N.C. Paladino, F. Pattou, Y. Renard, N. Santucci, F. Sebag, C. Trésallet, F. Triponez, K. Van

Den Heede, S. Van Slycke; Pathologists: M. Decaussin-Petrucci, E. Leteurtre, B. Cochand Priollet; Pediatricians: R. Coutant, I. Oliver-Petit, A. Stoupa; Radiologists: G. Russ, A. Muller; Biologists: J. Lopez, V. Raverot; Public health: I. Borget.

Disclosure of interest

The authors declare that they have no competing interest.

Acknowledgements

Thanks to the reviewers for their constructive comments and suggestions for modifications; in particular to Dr C. Bournaud, Pr M. Klein, Pr B. Goichot, Pr M.C. Vantyghem, and Pr J.L. Wemeau.

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