

International School of Thyroid Ultrasonography and Ultrasound-Assisted Procedures

Department of Endocrinology and Metabolism, and Department of Diagnostic Imaging and Interventional Radiology, Ospedale Regina Apostolorum, Albano Laziale (Rome), Italy



Focus on US-guided diagnostic procedures and laser treatment of **thyroid lesions**

First course: 09-10 April 2015

Second course: 17-18 September 2015

Background and aims

The incidence of thyroid nodules, and that of nodular goiter, has steadily increased over the last decades. In most cases these lesions are harmless and asymptomatic and warrant no treatment but a reliable diagnosis is mandatory for planning their management and for the treatment of the minority of them that cause local symptoms or are at risk of cancer. Familial and personal history and physical examinations are still cornerstones in the detection and clinical management of thyroid nodular disease. However, ultrasound (US) imaging is now an indispensable tool in the categorization of the risk of malignancy in thyroid nodules. Moreover, when US features cannot reliably rule out thyroid malignancy US imaging also provides accurate guidance for biopsy procedures.

Finally, US is increasingly employed for minimally invasive treatment of benign symptomatic lesions. The present workshop is aimed to provide an overview of current evidence concerning the diagnostic and therapeutic use of US for thyroid nodular disease together with a real hands-on experience and the discussion of clinical cases with experts in the field.

Minimally invasive treatment options of benign thyroid nodules

Most thyroid nodules are benign and remain asymptomatic, but some grow progressively and may cause local symptoms or elicit anxiety. Surgery is a much used therapeutic approach for thyroid lesions that, even if benign at FNA, are steadily growing over time. However, surgery is expensive, may necessitate life-long thyroid hormone substitution therapy, and may be followed, even if infrequently, by permanent complications. There is also increasing focus on side-effects, including the effect on quality of life, not traditionally considered in this context. Over the last two decades nonsurgical, minimally invasive techniques have been proposed for the treatment of benign thyroid nodules when surgery is contraindicated or declined. During the 1990s, the use of laser as a thermal source for the ablation of liver tumours was reported. Since then, further minimally invasive techniques, such as radiofrequency, microwave and cryotherapy, have been suggested for the nonsurgical treatment of liver tumours. Esaote and Elesta are collaborating with Department of Endocrinology and Metabolism, and Department of Diagnostic Imaging and Interventional Radiology, Ospedale Regina Apostolorum, Albano (Rome), Italy, in organizing an advanced course on thyroid ultrasonography focusing on new modalities for the diagnosis and treatment of thyroid nodules that will be exploring the practical aspects of US-guided diagnostic and laser therapy in the management of thyroid nodules. The main objectives of this live educational course are to review the latest news in thyroid ultrasound diagnostic criteria and applications in presence of thyroid nodules and to teach tools for use in daily clinical practice regarding the execution of diagnostic and laser treatment for benign nodules.

Learning objectives

After attending this live educational course, learners will have up-to-date knowledge on thyroid ultrasonography and on its novel applications such as laser treatment for benign nodule, thus being able to:

- Recognize US patterns of thyroid nodules suggestive of malignancy
- Refine the execution methods for fine needle aspiration biopsy on thyroid nodules
- Apply novel alternative interventional approaches to treat benign thyroid nodules and selected thyroid malignancies.







Scientific organizers

- Dr. Giancarlo Bizzarri, Chief of Department of Diagnostic Imaging and Interventional Radiology, Ospedale Regina Apostolorum; and
- Prof. Enrico Papini, Chief of Department of Endocrinology and Metabolism, Ospedale Regina Apostolorum, Albano Laziale Rome), Italy.

Organizing secretariat

• Dr. Irene Misischi, Department of Endocrinology and Metabolism, Ospedale Regina Apostolorum, mail: internationalschoolalbano@gmail.com

Scientific Programme, Day 1

Welcome and presentation of the learning objectives of this live educational course

9:00 Diagnostic Ultrasonography

Ultrasound Pulse Formation and Scanning the Ultrasound Beam

Echo Detection and Signal Processing

Color and Power Doppler US

Elastosonography

Equipment

- How to perform thyroid US
- When to perform thyroid US
- Thyroid US reporting
- 11:00 Coffee break

11:30 US criteria of malignancy

US features suggestive of benign or malignant lesions

When to perform US-guided thyroid biopsy

13:00 Lunch

- 15:00 Questions & answers on virtual cases
- 17:00 Conclusion of the first day of live educational course

Scientific Programme, Day 2

9:00 Interventional Ultrasonography

US-assisted thyroid FNA

US-guided core biopsy

Percutaneous ethanol injection of cystic nodules

Laser treatment in nodular goiter or thyroid nodules

11:00 Coffee break

11:30 Live cases illustrations

Live sessions of Percutaneous Ethanol Injection and Laser treatments of patients with thyroid nodules

13:00 Lunch

15:00 <u>Live cases illustrations</u>

Live sessions of Laser treatments of patients with thyroid nodules

Perspectives: use of minimally-invasive treatments for selected thyroid malignancies

Questions, answers and conclusion of the live educational course

General information Venue

These live educational courses will take place at the:

Department of Diagnostic Imaging, Department of Endocrinology and Metabolism,

Regina Apostolorum Hospital - Albano Laziale (Rome), Italy http://www.reginapostolorum.com/come raggiungerci.php

Language

The official language of the course will be English. The course is limited to eight participants with special interest in thyroid disease.

Hotel Reservations - Meridiano Congress International

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