

Barcelona, Spain

Joint Symposium 18

Thyroid + Inflammation & Infection Committee / European Thyroid Association (ETA)

Tuesday, October 15, 08:00-09:30

Session Title

Imaging on Thyroiditis

Chairpersons

Luca Giovanella (Bellinzona, Switzerland)

Camille Buffet (Paris, France / ETA)

Programme

08:00 - 08:30 Camille Buffet (Paris, France / ETA): Thyroiditis - Clinical Appraisal and Ultrasound Features

08:30 - 09:00 Luca Giovanella (Bellinzona, Switzerland): Thyroid Scintigraphy and Uptake in Patients with Thyroiditis - Is there a Current Role?

09:00 - 09:30 Giorgio Treglia (Bellinzona, Switzerland): Thyroiditis at PET Imaging with Different Tracers - Interpretation Criteria and Reporting

Educational Objectives

1. to describe the clinical characteristics and ultrasound features of thyroiditis
2. to discuss the current role of thyroid scintigraphy in patients with thyroiditis
3. to describe the common presentation of thyroiditis at PET with different radiopharmaceuticals.

Summary

Thyroiditis is a general term that encompasses several clinical disorders characterized by inflammation of the thyroid gland. The most common is Hashimoto thyroiditis; patients typically present with a nontender goiter, hypothyroidism, and an elevated thyroid peroxidase antibody level. Treatment with levothyroxine ameliorates the hypothyroidism and may reduce goiter size. Release of preformed thyroid hormone into the bloodstream may result in hyperthyroidism. This may be followed by transient or permanent hypothyroidism as a result of depletion of thyroid hormone stores and destruction of thyroid hormone-producing cells. Ultrasonography is a useful tool to make the diagnosis of thyroiditis based on the characteristics of the disease. In the differential diagnosis of thyroid nodules, ultrasound-guided fine-needle biopsy is an effective method to distinguish Hashimoto's thyroiditis from other thyroid disorders. Thyroid uptake measurements and scintigraphic findings (obtained with technetium-99m pertechnetate or iodine-123) play a complementary role along with thyroid function testing in differentiating autoimmune thyroiditis from other thyroid diseases, thereby influencing treatment. Homogeneous and diffuse increased F18-FDG uptake in the thyroid gland is usually seen in patients with chronic thyroiditis. Furthermore thyroiditis can be incidentally detected by PET/CT and PET/MRI examinations performed with other radiopharmaceuticals. When an incidental detection of suspicious thyroiditis at PET with different tracers is found, this finding needs to be described in the PET report and correlated with clinical and laboratory data.

Key Words thyroiditis, ultrasound; scintigraphy; PET; thyroid; inflammation