



LIPS Session 3

Thyroid Committee

Sunday, October 18, 15:00–16:30

Session Title

Getting 'It' Right: The Right Indication and Best Imaging Approach for Diagnostics in Hyperparathyroidism

Chairpersons

Virginia Liberini (Cuneo, Italy)

Murat Tuncel (Ankara, Türkiye)

Programme

- 15:00–15:30 **Petra Petranović Ovčareček** (Zagreb, Croatia): Parathyroid Ultrasound as Gatekeeper: Adenoma, Carcinoma, and the Thyroid You Cannot Afford to Miss
- 15:30–16:00 **Alfredo Campennì** (Messina, Italy): To Perform or Not to Perform [99mTc]Tc-MIBI Scintigraphy? Why, Who, and How
- 16:00–16:30 **Martin Huellner** (Zurich, Switzerland): 18F-Fluorocholine PET/CT and PET/MR – Rationale for Their Use in Parathyroid Imaging

Educational Objectives

1. An updated outline on the standard procedure for performing parathyroid ultrasonography, highlighting ultrasonographic features of parathyroid lesion(s).
2. Pros and cons of [99mTc]Tc-MIBI parathyroid scintigraphy: from qualitative evaluation to semi-quantitative analysis.
3. The current role and future perspectives of 18F-Fluorocholine PET/CT and PET/MR in parathyroid imaging, highlighting when and why they are preferred to other imaging modalities.

Summary

This session provides an updated overview of imaging in hyperparathyroidism, covering the correct indication and use of parathyroid ultrasonography, [99mTc]Tc-MIBI scintigraphy, and 18F-Fluorocholine PET/CT and PET/MR. Parathyroid ultrasound serves as the first-line study, while [99mTc]Tc-MIBI scintigraphy offers high detection rates with semi-quantitative analysis enabling differentiation of benign from malignant lesions. The session concludes with the growing role of 18F-Fluorocholine PET/CT and PET/MR, exploring their utility in primary hyperparathyroidism, ectopic adenomas, and their potential to outperform conventional imaging modalities.

Key Words

Hyperparathyroidism; Parathyroid Ultrasonography; Neck Ultrasonography; Parathyroid Hybrid Imaging; MIBI Scintigraphy; 18F-Fluorocholine PET/CT and PET/MR