

Düsseldorf, Germany

Pitfalls & Artefacts 5 (Thyroid) – Interactive

Tuesday, October 16, 08:00-9:30

Session Title

Pitfalls in Parathyroid Detection with Nuclear Medicine Imaging

Chairpersons

Jean-Noël Talbot (Paris)

Jasna Mihailovic (Novi Sad)

Programme

08:00 - 08:25 Domenico Rubello (Rovigo): Dual-Phase, Subtraction and SPECT/CT with MIBI

08:25 - 08:45 Markus Luster (Marburg): PET/CT with ^{11}C -Methionine

08:45 - 09:10 Sona Balogova (Bratislava): PET/CT with ^{18}F -Fluorocholine in Primary Hyperparathyroidism

09:10 - 09:30 Jean-Noël Talbot (Paris): PET/CT with ^{18}F -Fluorocholine in Secondary Hyperparathyroidism

Educational Objectives

1. Normal pattern and major variants for each tracer ($^{99\text{m}}\text{Tc}$ -sestaMIBI, $^{99\text{m}}\text{Tc}$ -pertechnetate or ^{123}I for subtraction, ^{11}C -methionine, ^{18}F -fluorocholine) and each imaging modality (subtraction scintigraphy, SPECT/CT, PET/CT, PET/MR)
2. What are the more frequent pitfalls common to all modalities
3. What are the more frequent pitfalls specific to one tracer, to one hybrid modality or to injection of contrast media?
4. How to avoid them at image acquisition: adequate preparation of the patient, modified acquisition protocols according to patient's history, adding a delayed acquisition ...
5. How to avoid false-positive results at interpretation: using image fusion or previous examinations (US, thyroid scintigraphy, CT ...), return to patient's history ...
6. How to avoid false-negative results

Summary

Presentation of educational topics to be applied to real cases of patients in an interactive manner. Its aim is to illustrate the role of nuclear medicine imaging (subtraction scintigraphy, SPECT/CT, PET/CT, PET/MR) in detecting hyperfunctioning parathyroid glands, to pinpoint the main pitfalls and artefacts in this context and to advise on how to avoid them.

Voting systems will allow the attendees to express their opinions and to evaluate their experience and skills in this field.

Key Words

Interactive session, Hyperparathyroidism, $^{99\text{m}}\text{Tc}$ -sestaMIBI, SPECT/CT, ^{11}C -methionine, ^{18}F -fluorocholine, PET/CT, PET/MRI