

Barcelona, Spain

Pitfalls & Artefacts 7 – Interactive

Oncology & Theranostics Committee

Wednesday, October 16, 08:00-09:30

Session Title

NET Imaging: Multiple Endocrine Neoplasias (MEN)

Chairpersons

Sona Balogova (Bratislava, Slovakia)

Jean-Noël Talbot (Paris, France)

Programme

08:00 - 08:30 Marie-Odile North (Paris, France): Genomics of MEN - Diagnostic Strategy and Pitfalls

08:30 - 09:00 Jean-Noël Talbot (Paris, France): Imaging MEN 1

09:00 - 09:30 Sona Balogova (Bratislava, Slovakia): Imaging MEN 2

Educational objectives

1. Although MEN are of a rare occurrence among the patients with neuroendocrine tumours (NET), the diagnosis of MEN may be suspected on the pattern of nuclear imaging, in particular somatostatin receptor PET or SPECT, or on the occurrence of several NET cases in a family. Which strategies are available to assess the diagnosis?
2. How long does the biology and genomics take to settle the diagnosis of MEN and shall imaging be delayed in the index patient?
3. Can biology yield equivocal results for this diagnosis?
4. Which explorations, in particular imaging, are needed in the family of a patient with a MEN?
5. What are the more frequent pitfalls of anatomical imaging (CT, MR) in this context?
6. Frequent patterns and major variants according to the type of NET for each tracer (somatostatin analogues, choline or fluorocholine, FDOPA, MIBG, FDG ...)
7. What are the more frequent pitfalls specific to one tracer, to one hybrid modality or to injection of contrast media?
8. How to avoid them at image acquisition: adequate preparation of the patient, modified acquisition protocols according to type of MEN, adding a delayed acquisition ...
9. How to avoid false-positive results at interpretation: using image fusion or previous imaging modalities return to patient's history, etc?
10. How to avoid false-negative results?

Summary

Presentation of educational topics to be applied to real cases of MEN or suspected MEN in an interactive manner.

The 1st talk will cover the genomics of the different types of MEN.

The 2nd and 3rd talks will aim to illustrate the role of nuclear medicine imaging in relation with anatomical imaging according to the type of MEN for detecting pancreatic NET, pituitary tumours, hyperfunctioning parathyroid glands, pheochromocytoma, medullary thyroid cancer.

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

Key Words

Multiple Endocrine Neoplasias, Genomics, family screening, FDOPA, choline, somatostatin receptor imaging, MIBG, CT, MRI