Symposium 26
Wednesday, October 16, 08:00-09:30

Session Title
Implementation of the new EANM Guideline for Pulmonary Embolism and Beyond

Chairpersons
Marika Bajc (Lund, Sweden)
Manuel Monreal Bosch (Barcelona, Spain)

Programme

08:00 - 08:20  Manuel Monreal Bosch (Barcelona, Spain): Pulmonary Embolism, Clinical Probabilities, Difficulties and Challenges

08:20 - 08:40  Geoff Schembri (Sydney, Australia): V/P SPECT-Performance and Gamuts. Importance of follow up Patients with PE

08:40 - 09:00  Hein Verberne (Amsterdam, Netherlands): When should we use Hybrid Imaging?

09:00 - 09:25  Marika Bajc (Lund, Sweden): Importance of Ventilation SPECT for Diagnosing other Cardiopulmonary Diseases and Calculating the Total Lung Function

Educational Objectives

1. Clinical status of patients with suspected PE, difficulties and challenges.
2. How to perform and interpret V/P SPECT in patients with suspected pulmonary embolism. Importance of follow-up in patients with PE.
3. When and how we should use hybrid imaging?
4. Recognition of other typical ventilation/perfusion patterns frequently present in patients with suspected PE, such as COPD, pneumonia and left heart failure.

Summary
A high clinical suspicion of pulmonary embolism (PE) is an essential prerequisite before any diagnostic imaging procedure.
V/P SPECT is a recommended first line procedure in patients with suspected PE. It is fast, it can be performed in any patient, without the burden of contrast and with minimal radiation exposure. It also offers quantification of PE extent which has an impact on the decision of safe outpatient therapy. It plays a key role in the follow-up of patients to identify those that might develop chronic PE. Among patients not showing signs of PE, ventilation images help to explain perfusion defects of a different nature such as obstructive diseases, parenchymal changes and heart failure.

Patients with COPD, left heart failure, and pneumonia might be a new indication for V/P SPECT.

Hybrid imaging V/P SPECT-CT, might have added value in patient with COPD, by better visualization of emphysema and diagnostic tumors.

With an increasing number of tomographic gamma cameras, V/P SPECT should be applied in each hospital with available standard software.

**Key Words**

Pulmonary embolism, V/P SPECT, ventilation, perfusion, follow up, pneumonia, COPD, heart failure, quantification of ventilation/perfusion impairments. Hybrid imaging