CTE Session 5
Technologists Committee
Monday, September 11, 16:45 – 18:15

Session Title
Cardiac inflammatory disease

Chairpersons
Andrea Santos (Lisbon, Portugal)
Domenico Albano (Brescia, Italy)

Programme
16:45 – 17:05 Paola Anna Erba (Bergamo, Italy): Nuclear Medicine’s input in Cardiac Inflammation – clinical overview
17:05 – 17:30 Valentina Mautone (Meldola (FC), Italy): The importance of patient preparation
17:30 – 17:50 Olivier Gheysens (Brussels, Belgium): Nuclear Medicine’s input in Cardiac Amyloidosis
17:50 – 18:10 Sofia Pereira (London, United Kingdom): Multimodality in cardiac Imaging: who are the imagers?

Educational Objectives
1. Overview nuclear medicine’s input in cardiac inflammation
2. Understand the different applications of nuclear medicine procedures to diagnose cardiac inflammatory disease
3. Have knowledge about the different imaging protocols available for PET & SPECT cardiac inflammation imaging techniques
4. Understand the importance of patient preparation in inflammatory cardiac imaging
5. Integrate the importance of imaging protocols and image processing to assess cardiac amyloidosis
6. Understand the major education needs and competencies of the technologists/radiographers performing cardiac imaging

Summary
Cardiac Inflammation disease is a very relevant cardiovascular and myocardial group of diseases, and can be assessed by various imaging techniques, including nuclear cardiology procedures. To detect and follow progressing disease is possible, by resorting to functional imaging, such as positron emission tomography (PET). The assessment of cardiac metabolism can be done by following [18F]-2-deoxy-2-fluoro-d-glucose (FDG) uptake, which can portray inflammation sites. Other molecules have been recently developed, to allow a more specific approach to cardiac inflammation disease. Due to its impact in the obtained images, patient correct preparation is of utmost importance and should be well understood in order to be applied in an optimized way.
Cardiac Amyloidosis imaging has increased lately and the imaging technique has been developed, as well as the image processing and quantification methods to improve diagnostic accuracy. Nuclear Medicine Technologists play an important role in the imaging set and specific skills need to be developed to have a high-level practice which benefits the overall quality of the study and, surely, the patient.
Key Words
Cardiac, inflammation, PET, FDG, SPECT, Amyloidosis, Nuclear Medicine Technologists competencies