Pre-Congress Symposium 6 (Cardiovascular / Inflammation & Infection / ASNC)
Saturday, October 13, 13:00-16:00

Session Title
Recent Imaging Guidelines on Myocardial Amyloidosis, Sarcoidosis and Large Vessel Vasculitis

Chairpersons
Prem Soman (ASNC, Pittsburgh)
Hein Verberne (Amsterdam)

Programme

13:00 - 13:20 Raymond Russell (ASNC, Providence): Basis of Myocardial Metabolic Imaging

13:20 - 13:40 Prem Soman (ASNC, Pittsburgh): Myocardial Amyloidosis - Clinical Perspective

13:40 - 14:00 Sharmila Dorbala (ASNC, Boston): Myocardial Amyloidosis - Imaging Guideline

14:00 - 14:20 Paco E. Bravo (ASNC, Philadelphia): Myocardial Sarcoidosis - Clinical Perspective

14:20 - 14:45 Coffee Break

14:45 - 15:05 Olivier Gheysens (Leuven): Myocardial Sarcoidosis - Imaging Guideline

15:05 - 15:25 Daniël Blockmans (Leuven): Large Vessel Vasculitis - Clinical Perspective

15:25 - 15:45 Riemer Slart (Groningen): Large Vessel Vasculitis - Imaging Guideline

15:45 - 16:00 Discussion

Educational Objectives
To learn on the clinical perspective and the correct use of the different imaging techniques with a focus on radionuclide imaging and based on the recently (not yet) published joint ASNC and EANM imaging guidelines for patients with known or suspected with:

1. cardiac amyloidosis
2. cardiac sarcoidosis
3. large vessel vasculitis

Summary

Cardiac involvement has major clinical and prognostic implications in amyloidosis. Acquired monoclonal immunoglobulin light-chain (AL) and transthyretin (TTR)-related (familial and wild-type/senile) disease are the most frequent causes of cardiac amyloidosis. In hereditary amyloidosis, cardiac involvement can limit short-term and long-term results of orthotopic liver transplantation (OLT) and influence decisions to perform combined heart-liver transplantation. Severe cardiac involvement in AL amyloidosis can limit optimal hematologic treatments, including bone marrow transplantation. Although differential diagnosis between TTR-related and AL amyloidosis is often complex and time-consuming it is essential as it may differentiate with regard to prognosis.

Sarcoidosis is a multisystem inflammatory granulomatous disease of unknown origin. Granulomas in sarcoidosis are compact, centrally organized collections of macrophages and epithelioid cells that are surrounded by lymphocytes. Granulomas from sarcoidosis are most often located in the lungs or its associated lymph nodes, but any organ can be affected. Sarcoidosis affects approximately 10 out of 100,000 persons each year. Cardiac sarcoidosis is reported to involve only 2%-5% of patients with systemic sarcoidosis, even though autopsy studies indicate a considerably greater prevalence of 27%. Adequate and timely assessment of cardiac involvement is crucial.

Large vessel vasculitis (LVV) is defined as a disease affecting mainly large arteries, with two major variants, Takayasu arteritis (TA) and giant cell arteritis (GCA). GCA often coexists together with PMR in the same patient, since both belong to the same disease spectrum. FDG-PET/CT is a functional imaging technique, which is an established tool in oncology, and has also demonstrated to have a role in the field of inflammatory diseases. Functional FDG-PET combined with anatomical CT angiography, FDG-PET/CT(A), may be of synergistic value for optimal diagnosis, disease activity monitoring, and evaluation of damage development of LVV. There are currently no guidelines regarding PET imaging acquisition for LVV and PMR, even though standardization is of utmost importance to facilitate clinical studies and for daily clinical practice. Recently a position paper has been published aiming to set an internationally accepted standard for FDG-PET/CT(A) imaging and reporting of LVV and PMR.