



LIPS Session 4

Inflammation & Infection Committee

Sunday, October 18, 16:45–18:15

Session Title

Diagnostic Utility and Clinical Challenges of [¹⁸F]-FDG PET/CT for Infection Imaging in Special Populations

Chairpersons

Ayah Nawwar (Bristol, United Kingdom)

Giorgio Treglia (Bellinzona, Switzerland)

Programme

16:45–17:15 **Domenico Albano** (Brescia, Italy): Critically Ill Patients

17:15–17:45 **Begoña Rodriguez** (Madrid, Spain): Solid Organ Transplantation and Immunocompromised Patients

17:45–18:15 **Marie Øbro Fosbøl** (Copenhagen, Denmark): Paediatrics

Educational Objectives

1. Describe the typical pattern of FDG PET/CT in the most common infectious diseases.
2. Describe the most frequent FDG PET pitfalls in critically ill patients affected by infectious diseases.
3. Describe the most frequent FDG PET pitfalls in immunocompromised patients affected by infectious diseases.
4. Describe the most frequent FDG PET pitfalls in children affected by infectious diseases.

Summary

[¹⁸F]FDG PET/CT has established itself as a fundamental non-invasive diagnostic technique in the investigation of patients with fever of unknown origin (FUO) or with infection foci. These conditions are inherently challenging due to the wide range of potential underlying causes, including inflammatory and infectious diseases, malignancies, and miscellaneous conditions. Data on the diagnostic performance of [¹⁸F]FDG PET/CT in special populations—such as paediatric patients, solid organ transplant recipients, immunocompromised individuals, and intensive care unit (ICU) patients—remain preliminary and heterogeneous. This session aims to describe the role of [¹⁸F]FDG PET/CT imaging in these specific populations, focusing on typical patterns, common pitfalls, and the potential clinical impact on diagnosis and patient management.

Key Words

Infection; ICU; Paediatrics; FDG PET/CT