



CME Session 11

Paediatrics Committee

Tuesday, September 12, 15:00 – 16:30

Session Title

Paediatric Lymphoma and Update on FDG

Chairpersons

Arnoldo Piccardo (Genoa, Italy)

Regine Kluge (Leipzig, Germany)

Programme

15:00 – 15:30 **Andische Attarbashi** (Vienna, Austria): Clinical background on paediatric lymphoma and what do clinicians expect from nuclear medicine

15:30 – 16:00 **Pinar Ozgen Kiratli** (Ankara, Turkiye): Role of Molecular Imaging (FDG PET-CT) in the evaluation paediatric lymphoma patients

16:00 – 16:30 **Lars Kurch** (Leipzig, Germany): Response to therapy assessment via FDG PET-CT

Educational Objectives

1. Brief clinical information on Hodgkin and nonHodgkin lymphomas in paediatric age group, as well as to gain an understanding on the clinicians point of view on imaging these patients
2. Imaging indications in paediatric lymphoma patients, with highlighting the importance of metabolic markers as well as visual findings on the reports
3. To define the role of FDG PET imaging findings in the management of lymphoma patients with an emphasis on Deuville criteria

Summary

Evaluation of the patients includes history, physical examination, bone marrow biopsy, total-body imaging, and laboratory tests. Nuclear medicine has an important role in the management of many cancers in paediatric age group with multiple imaging modalities and radiopharmaceuticals. ¹⁸F FDG is the radiotracer of choice for staging and management of patients with lymphoma.

Standard therapy of paediatric lymphoma typically involves chemotherapy, which may be followed by RT in selected cases. Therapy response is best evaluated by ¹⁸F-FDG-PET/CT, with highly reported sensitivities and specificities of HL and NHL at interim or after completion of therapy. Deauville criteria were accepted as a therapy response criteria in patients with HL by National Cancer Center Network guideline. There are several semiquantitative parameters used for the evaluation of therapy response such as change in individualized SUV, PET-derived MTV, and TLG. The best parameter or criteria for response evaluation and best timing for response assessment are still under debate.

Key Words

Lymphoma, functional imaging, FDG PET-CT, paediatrics