

Düsseldorf, Germany

Annual Congress of the
European Association of Nuclear Medicine

October 13 – 17, 2018
Düsseldorf, Germany

CTE 3 (Technologists / Neuroimaging)

Monday, October 15, 14:30-16:00

Session Title

Nuclear Medicine Imaging in Dementia

Chairpersons

Giorgio Testanera (London)

Henryk Barthel (Leipzig)

Programme

- 14:30 - 15:00 Koen Van Laere (Leuven): Consolidated Practice in Nuclear Medicine Imaging for Dementia
- 15:00 - 15:30 Peter Schoenknecht (Arnsdorf): State of the Art of Dementia Treatment
- 15:30 - 16:00 Alexander Drzezga (Cologne): Future Trends in Nuclear Medicine Imaging for Dementia

Educational Objectives

1. Get acquainted with the physio-pathological processes of disease involved in Dementia
2. Explain clinical pathways for Dementia clinical diagnosis and treatment
3. Describe the imaging protocols and techniques that are considered Nuclear Medicine state of the art in diagnose of Dementia
4. Understand specific clinical indication and importance of good quality performance in Nuclear Medicine procedure for Dementia imaging
5. Overview of new commercial and experimental tracers available for Dementia imaging.
6. Discuss the role of new imaging procedures including PET/CT development and PET-MRI

Summary

Demographic ageing is a worldwide process that shows the successes of improved health care over the last century. Many are now living longer and healthier lives and so the world population has a greater proportion of older people. Dementia mainly affects older people, although there is a growing awareness of cases that start before the age of 65. Dementia is a life-threatening disorder for patients that also has great impact on the quality of life of all relatives and closely-knit person to the patient. The two major degenerative causes of dementia are Alzheimer's disease and vascular dementia. Neuropathological causes of Alzheimer disease are related to proteinopathy characterized by neuronal loss due to formation of two different insoluble protein aggregates: beta-amyloid plaques and neurofibrillary tangles. Nuclear Medicine is a largely used modality to provide early diagnosis of causes of mild cognitive impairment, which is a pre-dementia stage. Early diagnosis plays a key role in the effective therapeutical approach to dementia.

PET-CT revolution brought on a lot of novel research, and different tracers have now become available, such as beta-amyloid tracers, tau tracers, tracers related to dopamine transport and many more.

Key Words

Dementia, Alzheimer disease, Amyloid tracers, Spect-CT, PET-CT, Therapy

Take Home Message

In this session we will not only overview consolidated practice in Nuclear Medicine imaging for Dementia, but we will also discuss state of the art therapeutical approach and future trends for brain functional imaging.

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