

Düsseldorf, Germany

CTE 2 (Technologists) - Interactive
Sunday, October 14, 11:30-13:00

Session Title

Radionuclide Therapy - A Multidisciplinary Approach

Chairs

Christelle Terwinghe (Leuven)
Mariëlle Visser (Maastricht)

Programme

- 11:30 - 12:00 Marc Konijnenberg (Rotterdam): Tips and Tricks for Dosimetry Assessment
12:00 - 12:30 Zéna Wimana (Brussels): Labelling and Dispensing of Therapeutic Radiopharmaceuticals
12:30 - 13:00 Christophe Deroose (Leuven): Pitfalls During Radionuclide Therapy Administration

Educational Objectives

1. Understand the principles of dosimetry
2. Overview dosimetry for Radionuclide Therapy procedures
3. Describe peptide receptor radionuclide therapy labelling and QC procedure
4. Describe the dose preparation of radionuclide therapies
5. Overview pitfalls during the administration of Radionuclide therapy
6. Discuss actions to be taken to decrease the risk of extravasation
7. Discuss actions to be taken when extravasation occurs

Summary

The rapid growth of Radionuclide Therapy in the Nuclear medicine is a fact. More and more technologists are involved in the management of Radionuclide Therapy Procedures, in addition to the daily diagnostic examinations.

This interactive session is divided in 3 specialities where the technologist can contribute his/her knowledge and experience at the Nuclear Medicine department: dosimetry, radiopharmacy and administration.

The European Council directive 2013/59 Euratom mandates dosimetry in order to plan Radionuclide Therapy to individual patients and verification of the delivered dose. Dosimetry procedures have to be set up and have to be educated well.

New radiolabelling and dispensing techniques are appearing in the radiopharmacy lab as well as new Quality Control procedures for equipment and radiopharmaceuticals.

During administration, several complications could occur. The most prominent is the extravasation of the radiopharmaceutical. A good plan to decrease the risk and to treat extravasation needs to be accessible and known by the technologists involved.

Key Words

Radionuclide Therapy, dosimetry, radiopharmacy, administration, extravasation.

Take Home Message

The growing nature of radionuclide therapy influences all disciplines involved in the process of dose calculation, injection, patient clinical management. As such, all members of this multidisciplinary team must be well aware of the patient workflow and challenges involved.