Technologist Involvement in Accreditation and Future Directions

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Quantitative PET-CT with surrogate markers is growing in importance as fundamental tool for evaluating effects of therapy in oncological clinical trials enrolled patients.

Together with accreditated scanner, it is fundamental that professionals ensure high quality and reproducibility of studies. This can be achieved through accurate quality controls of scanners and accuracy in performing examinations.

In most european national realities Nuclear Medicine Technologist (NMT) and Radiographers (NMR) are the main actors in all technical aspects needed to perform PET-CT scans. Their competencies includes all steps required to guarantee a quality scan, like scanner periodical quality controls, checking patient preparation, injecting tracers, setting correct parameters on PET scanner and ensure timing of procedures. All these steps are mandatory to provide quality scan specifically when a patient is identified as participating to oncological clinical trials.

Furthermore, PET/CT system accreditation program under the EANM Research Ltd (EARL) is followed by an increasing number of NM centres all around Europe. NMT and NMR can play a major role in scanner accreditation as in ensuring strict adherence to suggested guidelines for quantitative imaging.

To follow this trend, NMT and NMR need both a strong input in their benchmark education and in their professional development. It is important for them to build an adequate mindset able to face the challenges of the high level performance needed for dealing with quantitative Nuclear Medicine (NM) and PET imaging in the competitive environment of health care.

EANM reviewed and modernised its educational system in 2016 and founded the European School of Multimodality Imaging & Therapy (ESMIT), representing EANM's response to the rising demand for dedicated training in all modalities related to hybrid imaging and new therapeutic applications in the NM training program.

Following this review, in latest guidelines, educational related document and educational project, EANM and all main international NM related association both quantitative Nuclear Medicine procedure and quality controls gained space and interest, and NMT are provided of many tools to gain and improve their competencies and skills in these topics.

In this talk I will highlight possible ways in which NMT and NMR may advance their practice and get more involved into PET scanner accreditation and quantitative imaging. I will also try to foresee potential future directions that will be discussed interactively.

References:

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