Session 3

Radiological Protection in Medicine Today

Current Global and Korean Issues in Safety of Nuclear Medicine Procedures

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In recent years, the management of patient doses in medical imaging has evolved as the concern about radiation exposure increases. Efforts and techniques to reduce the radiation doses are focused not only on the basis of patient safety but also the fundamentals of justification and optimisation in cooperation with international organisations such as ICRP, IAEA, and WHO. The Image Gently campaign in children and Image Wisely campaign in adults to lower radiation dose have been initiated in the USA. The EANM paediatric dosage card, North American consensus guidelines, and Nuclear Medicine Global Initiative all are recommending the administered activities of radiopharmaceuticals in children. Diagnostic reference levels (DRLs), which were developed mostly in Europe, might be an important tool to manage patient doses. In Korea, the overexposure to the radiation even by the use of medical imaging has become a public issue, especially after the nuclear accident in Fukushima. As a result, the Korean Nuclear Safety and Security Commission revised the technical standards for radiation safety management in medical fields. In parallel, DRLs for nuclear medicine procedures have been collected on a nation-wide scale. The notice of total effective dose from PET/CT for cancer screening has been mandatory since mid-November 2014.