

Development of The Practical Guidelines of PET-CT Quality Control

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Introduction: Positron emission tomography combined with computed tomography (PET-CT) provides both functional and anatomical images of high quality noninvasively. Recently, increase in the use of PET-CT for diagnosis of the cancer and the planning of radiation therapy accrues the demands for accurate evaluation of system performance and well designed programs of quality assurance. We analyzed the quality assurance practice in the PET-CT laboratories and developed the practical guidelines of PET-CT quality assurance.

Methods: The survey questionnaire were send to 60 PET-CT laboratories and the data of quality assurance practice were collected. We reviewed the surveyed data and the quality assurance systems of foreign counties and made the practical guidelines of PET-CT quality assurance.

Results: The developed practical guidelines of PET-CT quality assurance consists of practical items of performance evaluation and protocols for quality assurance. For 30 PET-CT laboratories, we are investigating the usefulness of the new guidelines.

Conclusions: We developed the new practical guidelines of PET-CT quality assurance. These guidelines could be used to guarantee the confidence of PET-CT imaging as a quality assurance keeper.