IN THIS ISSUE

CONTINUING EDUCATION

Kara Duncan

Radiopharmaceuticals in PET Imaging

Duncan introduces the nuclear medicine technologist to the use of PET imaging. The reader will learn about the isotopes used in PET and how they differ from traditional isotopes.

Ruth Davidhizar, Gregory Bechtel and Steven B. Dowd

Patient Education: A Mandate for Health Care in the 21st Century

This first article, of a two-part series, presents the foundation for patient education in the nuclear medicine department. After completing the article, the reader should be able to: (a) describe the mandates for patient education; (b) discuss the current practice of patient education in health care; (c) describe the effective implementation of learning; (d) list barriers and facilitators to patient learning; and (e) give examples of how barriers to learning can be minimized and facilitators can be maximized.

IMAGING

Rebecca Sajdak and Elaine Ariola-Pienschke

Optimized Technical Considerations for Acquiring High-Quality FDG Studies with a Dual-Headed Gamma Camera

This retrospective analysis was designed to optimize the parameters and techniques required to successfully perform high-quality coincidence imaging in a general nuclear medicine department using a dual-headed gamma camera.

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Gretchen E. Rose Wolf

Simulated Frame-Loss Artifacts in Myocardial Perfusion SPECT Imaging: The Difference Between Single- and Dual-Headed Systems

This study was performed to illustrate the artifacts produced in myocardial perfusion studies when a frame or frames are lost in single- and dual-headed SPECT imaging methodologies. 248

Masahisa Onoguchi, Hirotaka Maruno, Teruhiko Takayama and Hajime Murata

How Precisely Do SPECT Images Reflect Tracer Uptake in Myocardial Infarction? A Comparison of Thallium-201 and Technetium-99m Using a Myocardial Phantom

The authors compared the count ratios of ²⁰¹Tl and ^{99m}Tc on SPECT images and the true radioactivity in a myocardial phantom to study how precisely SPECT images reflect tracer uptake in myocardial infarction.

Helen Patterson, G. Heather Clarke, Richard Guy and W. John McKay

Head Movement in Normal Subjects During Simulated Brain Imaging

Patterson et al. classified and measured head movements during simulated brain imaging recorded on videotape images of volunteers.

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NUCLEAR PHARMACY

James A. Ponto

Technetium-99m Radiopharmaceutical Preparation Problems: 12 Years of Experience

This retrospective examination of ^{99m}Tc preparation problems was conducted to better define the incidence, recognize patterns and identify causes of substandard ^{99m}Tc radiopharmaceutical products.

Michael P. White, April Mann, Dawn M. Cross and Gary V. Heller

Evaluation of Technetium-99m Red Blood Cell Labeling Efficiency in Adults Receiving Chemotherapy and the Clinical Impact on Pediatric Oncology Patients

The labeling efficiency of three products from two manufacturers and images from 30 patients referred for clinical radionuclide ventriculograms before chemotherapy were evaluated to determine the best labeling technique.

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Mohan Patel, Azu Owunwanne, Mahmoud Tuli, Khalda Al-Za'abi, Shihab Al-Mohannadi, Mahmoud Sa'ad, Shaukat Jahan, Asha Jacob and Azza Al-Bunny

Modified Preparation and Rapid Quality Control Test for Technetium-99m-Tetrofosmin

The objectives of this study were to: modify the preparation of ^{99m}Tc-tetrofosmin by using twice the amount of ^{99m}TcO₄ recommended by the manufacturer; evaluate the use of miniaturized rapid paper chromatography (MRPC) for quality control testing; and determine the in vitro stability of the modified preparation using MRPC.

Ming-Der Yu, Tim Quinton and Stanley M. Shaw

Influence of Iodine-131 Solution Volume and Storage Time on In Vitro Dissolution

This investigation was conducted to determine the influence of ¹³¹I solution volume and storage time on the in vitro release of radioio-dide from capsules. **274**

EDUCATION

Edwina J. Adams, Elisabeth Kilburn-Watt and Simon F. Cowell

The Earlier the Better: An Evaluation of Changes to Teaching Year 1 Nuclear Medicine

Adams et al. evaluate the changes made in 1996 to the Year 1 nuclear medicine program at The University of Sydney, Australia. The authors wanted to determine if the changes made in content and mode of delivery raised the clinical abilities of students entering their clinical placement in Year 2.