

# JNM



Official Publication of  
The Society of Nuclear Medicine

## SNM NEWSLINE

- 15N From Washington: A Government Relations Update**  
*Kristen D.W. Morris and Valerie Fedio*
- 27N Agreement States Still Chafing Under NRC Authority**  
*J. Rojas-Burke*
- 31N Lines from the President: Expanding the Therapeutic Applications of Nuclear Medicine**  
*Leon S. Malmud, MD*
- 32N News Briefs: Supreme Court Will Hear Case Against Radioactive Waste Policy Amendments Act; Misadministration Lawsuit Spurs Nuclear Medicine Inspections in California; New Way to Order SNM Books**

## HUMAN STUDIES

- 313 Parathyroid Imaging with Technetium-99m-Sestamibi: Preoperative Localization and Tissue Uptake Studies**  
*Michael J. O'Doherty, Andrew G. Kettle, Philip Wells, Richard E.C. Collins, and Anthony J. Coakley*
- 319 Technetium-99m-MIBI Uptake in Benign and Malignant Bone Lesions: A Comparative Study with Technetium-99m-MDP**  
*Biray Caner, Mehmet Kitapçı, Mustafa Unlü, Günaydin Erbençi, Tamer Çaliköglü, Talat Göğüs, and Coşkun Bekdik*
- 324 Positron Emission Tomography Using Fluorine-18-Fluorodeoxyglucose in Malignant Lymphoma: A Comparison with Proliferative Activity**  
*Junichi Okada, Kyosan Yoshikawa, Makiko Itami, Keiko Imaseki, Kimiichi Uno, Jun Itami, Junpei Kuyama, Atsuo Mikata, and Noboru Arimizu*
- 330 Editorial: Clinical Applications of Positron Emission Tomography in Cancer: The Good, The Bad, and The Ugly**  
*Henry D. Royal*
- 333 Evaluation of Liver Tumors Using Fluorine-18-Fluorodeoxyglucose PET: Characterization of Tumor and Assessment of Effect of Treatment**  
*Shinichi Okazumi, Kaichi Isono, Kazuo Enomoto, Toshiyuki Kikuchi, Masahiko Ozaki, Hiroshi Yamamoto, Haruyuki Hayashi, Takehide Asano, and Munemasa Ryu*
- 339 Editorial: Quantitating Tumor Glucose Metabolism with FDG and PET**  
*Randall A. Hawkins, Yong Choi, Sung-Cheng Huang, Cristina Messa, Carl K. Hoh, and Michael E. Phelps*

- 345 Validation of Gallium-67-Citrate Single-Photon Emission Computed Tomography in Biopsy-Confirmed Residual Hodgkin's Disease in the Mediastinum**  
*Lale Kostakoglu, Samuel D.J. Yeh, Carol Portlock, Robert Heelan, Tzy-Jyun Yao, Donna Niedzwiecki, and Steven M. Larson*
- 351 Bone Scintigraphy in Preschool Children with Lower Extremity Pain of Unknown Origin**  
*Emanuela E. Englaro, Michael J. Gelfand, and Harriet J. Paltiel*
- 355 Effects of Dipyridamole Infusion on Human Renal Function Observed Using Technetium-99m-DTPA**  
*Timothy B. Latham, Frank S. Prato, Gerald Wisenberg, and Lionel Reese*
- 359 The Frequency of Asymptomatic and Electrically Silent Exercise-Induced Regional Myocardial Ischemia During First-Pass Radionuclide Angiography with Upright Bicycle Ergometry**  
*Kim A. Williams, Dory F. Sherwood, and Kathleen M. Fisher*
- 365 Diagnostic Value of Technetium-99m Radionuclide Angiography for Detecting Thrombosis in Left Atrial Appendage**  
*Toshiisa Uehara, Tsunehiko Nishimura, Kohei Hayashida, and Takahiro Kozuka*

## LABORATORY STUDIES

- 373 Radiation-Induced Inhibition of Tumor Growth as Monitored by PET Using L-[1-<sup>11</sup>C]Tyrosine and Fluorine-18-Fluorodeoxyglucose**  
*Bernard J.G. Daemen, Philip H. Elsinga, Anne M.J. Paans, Andre R. Wieringa, Antonius W.T. Konings, and Willem Vaalburg*
- 380 Dosimetry at the Cellular Level of Kupffer Cells After Technetium-99m-Sulphur Colloid Injection**  
*David Gardin, Nicole Colas Linhart, Anne Petiet, and Bernard Bok*
- 384 Editorial: Does Nonuniformity of Dose Have Implications for Radiation Protection?**  
*Amin I. Kassis and S. James Adelstein*
- 388 Biodistribution and Kinetics of Radiolabeled Proteins in Rats with Focal Infection**  
*Wim J.G. Oyen, Roland A.M.J. Claessens, Jos W.M. van der Meer, and Frans H.M. Corstens*
- 394 Editorial: Targeted Proteins for Diagnostic Imaging: Does Chemistry Make a Difference?**  
*Alan R. Fritzberg and Paul L. Beaumier*
- 398 Polymeric Microspheres for Radionuclide Synovectomy Containing Neutron-Activated Holmium-166**  
*Russell J. Mumper, Betty Jo A. Mills, U. Yun Ryo, and Michael Jay*
- 403 Experimental Study on Radioactive Pathways of Hypodermically Injected Technetium-99m**  
*Francisco M. Kovacs, Victor Gotzens, Alicia García, Felix García, Nicole Mufraggi, David Prandi, Jorge Setoain, and Fidel San Roman*

**407 Editorial: Anatomic Divisions**

*James A. Scott*

**409 Editorial: Nuclear Medicine and Acupuncture  
Message Transmission**

*Pierre de Vernejoul, Pierre Albarède, and Jean-Claude Darras*

**413 Membrane Trapping of Carbon-11-Labeled  
1,2-Diacylglycerols as a Basic Concept for  
Assessing Phosphatidylinositol Turnover  
in the Neurotransmission Process**

*Yoshio Imahori, Ryou Fujii, Satoshi Ueda, Keigo Matsumoto,  
Kazuo Wakita, Tatsuo Ido, Tadashi Nariai,  
and Hisamitsu Nakahashi*

**423 Synthesis, Rodent Biodistribution, Dosimetry,  
Metabolism, and Monkey Images of Carbon-11-Labeled  
(+)-2 $\alpha$ -Tropanyl Benzilate: A Central Muscarinic  
Receptor Imaging Agent**

*G. Keith Mulholland, Charlotte A. Otto, Douglas M. Jewett,  
Michael R. Kilbourn, Robert A. Koeppe, Phillip S. Sherman,  
Neil A. Petry, James E. Carey, Edward R. Atkinson,  
Sydney Archer, Kirk A. Frey, and David E. Kuhl*

**CASE REPORTS**

**431 Identification and Differentiation of Congenital  
Gallbladder Abnormality by Quantitative  
Technetium-99m IDA Cholescintigraphy**

*Mohammad A. Gad, Gerbail T. Krishnamurthy,  
and Jerry V. Glowniak*

**435 Radiographic and Neuro-SPECT Imaging in an  
Immature Third Ventricle Teratoma: Case Report**

*Emmanuel M. Cleto, Jr., Richard A. Holmes, Amolak Singh,  
Robin Bierman, Saiful Islam, and Timothy J. Hoffman*

**438 Comparison of Independent Aura, Ictal, and Interictal  
Cerebral Perfusion**

*Stuart C. Ramsay, Andrew F. McLaughlin, Robert Greenough,  
John Walsh, and John G. Morris*

**METHODOLOGY**

**441 Application of a Continuous Ventricular Function  
Monitor with a Miniature Cadmium Telluride Detector  
in Patients with Coronary Artery Bypass Grafting**

*Junichi Taki, Akira Muramori, Kenichi Nakajima, Hisashi Bunko,  
Michio Kawasaki, Norihisa Tonami, and Kinichi Hisada*

**448 Editorial: Nuclear Probes in Cardiology**

*Arthur Lahiri and John Crawley*

**451 An Evaluation of Maximum Likelihood-Expectation  
Maximization Reconstruction**

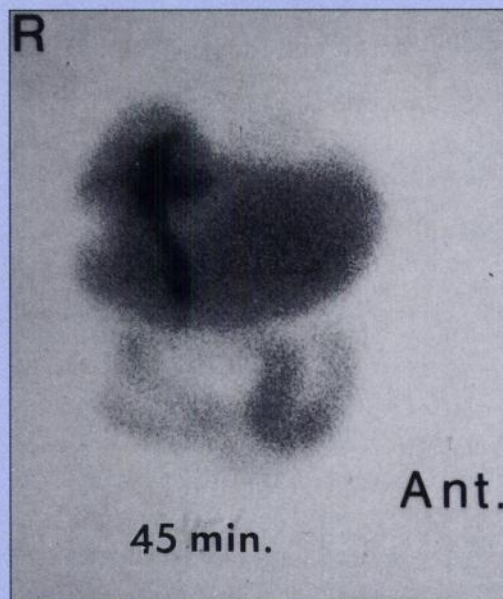
*David R. Gilland, Benjamin M.W. Tsui, Charles E. Metz,  
Ronald J. Jaszczak, and J. Randolph Perry*

**458 Three-Dimensional Presentation of the Fourier  
Amplitude and Phase: A Fast Display Method for Gated  
Cardiac Blood-Pool SPECT**

*Eörs Máté, Janos Mester, László Csernay, Attila Kuba,  
Shahram Madani, and Árpád Makay*

**FIRST IMPRESSIONS**

Hepatobiliary scan for right upper quadrant pain.  
For acquisition information, please turn to page 387.



**DEPARTMENTS**

**332 Self-Study Test**

**463 Letters to the Editor**

**Book Reviews**

**470 Computed Tomography and Magnetic Resonance of the Thorax**

*Reviewed by S. Mitchell Rivitz*

**470 Nuclear Medicine in Gastroenterology**

*Reviewed by James A. Scott*

**35A Calendar**

**40A Classified Advertising**

**48A New Products**

**50A Index to Advertisers**