The Journal of Nuclear Medicine

Official Publication of The Society of Nuclear Medicine

Volume 28, Number 5 May 1986

THE JOURNAL OF NUCLEAR MEDICINE (ISSN 0161-5505) is published monthly by The Society of Nuclear Medicine, Inc., 136 Madison Avenue, New York, NY 10016. Second Class Postage paid at New York, NY and additional mailing offices. Postmaster, send address changes to The Journal of Nuclear Medicine, 136 Madison Avenue, New York, NY 10016.

EDITORIAL COMMUNICATIONS should be sent to the Editor: Thomas P. Haynie, MD, The Journal of Nuclear Medicine, Office of Special Publications, The University of Texas M. D. Anderson Hospital, 6723 Bertner Avenue, Houston, TX 77030 (713)792-6015. Books and monographs covering the use of nuclear medicine and its allied disciplines will be reviewed as space is available. Send review copies to the Editor.

BUSINESS COMMUNICATIONS concerning advertising, subscriptions, change of address, and permission requests should be sent to the publisher, The Society of Nuclear Medicine, 136 Madison Avenue, New York, NY 10016 (212)889-0717. Advertisements are subject to editorial approval and are restricted to products or services pertinent to nuclear medicine. Advertising rates are available from the publisher. Closing date is the first of the month preceding the date of issue.

SUBSCRIPTION RATES for 1986 calendar year are \$100 within the United States; \$110 for Canada and Pan American countries; \$130 elsewhere. Student subscriptions are \$50 (with proof of student status). Single copies \$9.00; foreign \$10.00; convention issue (May) \$11.00; foreign \$12.00. Make checks payable, in U.S. dollars drawn on U.S. banks, to The Society of Nuclear Medicine. Notify the Society of change of address and telephone number at least 30 days before date of issue by sending both the old and new addresses.

COPYRIGHT © 1986 by The Society of Nuclear Medicine, Inc. All rights reserved. No part of this work may be reproduced or translated without permission from the copyright owner. Because the copyright on articles published in *The Journal of Nuclear Medicine* is held by the Society, each author of accepted manuscripts must sign a statement transferring copyright. See Information for Authors for further explanation, which appears on the second page preceding the Calendar.

SNM NEWSLINE Nuclear Medicine Community Explores Problems of Computer/Equipment Market; SNM Computer Council Considers Formulating Software Guidelines Commentary: Toward a "Win-Win" Relationship Jonathan M. Links586 Technologist Section Completes First Survey on DRGs.............588 SNM Takes First Step in Enhancing Representation of Non-U.S. Members; Board of Trustees Discusses SNM Reorganization and Other Action Items News Briefs: German Rules Spur Detector Development; Council on Graduate Medical Education; Senator CLINICAL SCIENCES Evaluation of the Accuracy of Steady-State Krypton-81m Method for Calculating Right Ventricular Ejection Fraction Hamphrey R. Ham, Philipe R. Franken, Bernard George, Eric Delcourt, 593 Marcel Guillaume, and Amnon Piepsz..... Gated Right Ventricular Studies Using Krypton-81m: Comparison with First-Pass Studies Using Gold-195m .602 John L. Caplin, William D. Flatman, and Duncan S. Dymond Gated Xenon Scans for Right Ventricular Function Diagnosis of Diffuse Hepatocellular Diseases Using SPECT Takao Kodama, Katsushi Watanabe, Hiroaki Hoshi, Seishi Jinnouchi,616 Keiko Arakawa, Sizuo Kusumoto, and Hiroshi Honda..... Scanning with Iodine-131 MIBG in Children with Solid Tumors: An Initial Appraisal Scintigraphic Features of Primary Sacral Tumors Case Reports Detection of Deep Venous Thrombosis by Indium-111 Leukocyte Scintigraphy Spurious Thyroid Cancer Metastasis: Saliva Contamination Artifact in High Dose Iodine-131 Metastases Survey Hee-Myung Park, Robert D. Traver, Donald S. Schauwecker, .634 and Robert Burt..... Cerebral Edema Following Iodine-131 Therapy for Thyroid Carcinoma Metastatic to the Brain

BASIC SCIENCES

5.1510 50121.020
Quantitative Relationship Between Global Left Ventricular Thallium Uptake and Blood Flow: Effects of Propranolol, Quabain, Dipyridamole, and Coronary Artery Occlusion Jacques A. Melin and Lewis C. Becker
Computer Modeling of Planar Myocardial Perfusion Imaging: Effect of Heart Rate and Ejection Fraction on Wall Thickness and Chamber Size Josef Machac, Howard Levin, Ethan Balk, and Steven F. Horowitz
Characterization of Beta-Adrenoreceptors In Vivo with Iodine-131 Pindolol and Gamma Scintigraphy Bernadette Hughes, David R. Marshall, Burton E. Sobel, and Steven R. Bergmann
Renal Tubular Receptor Imaging with Iodine-131-Labeled Peanut Lectin: Pharmacokinetics and Renal Clearance Mechanism in Animals
Graeme R. Boniface, Mavanur R. Suresh, David J. Willans, Yun K. Tam, Alec Shysh, B. Michael Longenecker, and Antoine A. Noujaim
Boron Distribution Analysis by Alpha-Autoradiography Masamitsu Abe, Kazuyoshi Amano, Katsutoshi Kitamura, Jun Tateishi, and Hiroshi Hatanaka
Technetium-99m Labeling of Murine Monoclonal Antibody Fragments
Buck A. Rhodes, Paul O. Zamora, Keith D. Newell, and Edward F. Valdez
Technical Notes
Effect of Variable Left Ventricular Vertical Orientation on Planar Myocardial Perfusion Images Steven F. Horowitz, Joseph Machac, Howard Levin, and Deborah Matza 694
SPECT Liver Imaging Using an Iterative Attenuation Correction Algorithm and an External Flood Source J.A. Malko, R.L. Van Heertum, G.T. Gullberg, and W.P. Kowalsky
Effects of Asymmetric Photopeak Windows on Flood Field Uniformity and Spatial Resolution of Scintillation Cameras L. Stephen Graham, Richard L. LaFontaine, and Mark A. Stein
Application of Robotics to Radiopharmaceutical Preparation: Controlled Synthesis of Fluorine-18 16α -Fluoroestradiol- 17β
James W. Brodack, Michael R. Kilbourn, Michael J. Welch, and John A. Katzenellenbogen
EDITORIAL
Gated Blood-Pool Scanning in the Critically Ill: A Valuable Tool for Clinical Research Margaret M. Parker and Joseph E. Parrillo
DEPARTMENTS
Letters to the Editor
Hypertrophied Moderator Band in Pulmonary Sarcoidosis Charles M. Intenzo, Chan H. Park, and Harold Israel

The Journal of Nuclear Medicine

Volume 27, Number 5 May 1986

Problem with Mouse Neuroblastoma (C 1300) as a Model for Iodine-131 MIBG Uptake	
Richard P. Spencer, Eldon E. Leutzinger, Larry A. Spitznagle, Fazle Hosain, Nita Jain, and Karen Kolstad	726
Pulmonary Sequestration or Tumor on Radionuclide Angiography? Mohammed Moinuddin	
Reply Yasuhiko Kobayashi	
Can a 24-Hour Image in Bone Scan Differentiate Osseous Metastasis from Benign Bone Disease? Shigeru Kosuda, Jinsei Satoh, Atsushi Kubo, and Shozo Hashimoto	727
Reply	121
Ora Israel, Dov Front, Alex Frenkel, and Uriel Kleinhaus	728
Correction: NMR Physics and Instrumentation Diplomates	729
Book Reviews	
An Atlas of Normal Skeletal Scintigraphy Reviewed by William D. Kaplan	730
NCRP Proceedings No. 6-Some Issues Important in Developing Basic Radiation Protection Recommendations Reviewed by Anthony R. Benedetto	730
Nuclear Imaging In Pediatrics Reviewed by Bruce J. Barron	
Abstracts	732
Information for Authors	738
New Products	. 22A
Calendar	. 23A
Classified Advertising	27A
Index to Advertisers	30Δ