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Dual-Isotope Brain SPECT Imaging with Technetium-99m and Iodine-123: Clinical Validation Using Xenon-133 SPECT

Dual-isotope results were compared to those obtained using sequential ¹³³Xe SPECT scans in subjects with known stable cerebrovascular disease. Page 1919

The Role of Sestamibi Scintigraphy in the Radioisotopic Assessment of Myocardial Viability

The relationship between sestamibi uptake as a marker of myocardial viability and post-revascularization recovery was studied in 14 patients who underwent sestamibi scintigraphy, quantitative coronary angiography and two-dimensional echocardiography. Page 1925

PET-Fluorodeoxyglucose of Cranial and Spinal Neuromas

Five patients with eighth nerve, one with ninth nerve, and one with cervical neuromas were studied with PET and [¹⁸F]fluorodeoxyglucose. Four of the patients had surgery prior to the study, and six had subsequent surgery. Page 1931

Can Dynamic Krypton-81m Imaging Separate Regional Ventilation and Volume?

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Brain SPECT in Neonates Following Extracorporeal Membrane Oxygenation: Evaluation of Technique and Preliminary Results

Regional cerebral blood flow alterations were measured using SPECT and ^{99m}Tc-HMPAO following extracorporeal membrane oxygenation in 13 newborns..... Page 1943

Human Pharmacokinetics and Radiopharmacological Studies of the Myocardial Perfusion Agent: Technetium (2-Carbomethoxy-2-Isocyno Propane)‡

Dynamic imaging and HPLC analysis were performed in humans and guinea pigs to outline the pharmacological basis of the kinetics of ^{99m}Tc-CPI. Page 1949

Specific and Nonspecific Immunoassays to Detect HAMA After Administration of Indium-111-Labeled Monoclonal Antibody to Patients with Ovarian Cancer

Three specific OV-TL 3-based HAMA assays were developed and tested, along with two commercially available HAMA assays, for their ability to identify the presence of HAMA in samples from patients injected with ¹¹¹In OV-TL3-F(ab')₂..... Page 1958

Dynamic SPECT Imaging of Fopamine D2 Receptors in Human Subjects with Iodine-123-IBZM

Serial SPECT scans and arterial blood measurements of radiolabeled metabolites were obtained in order to assess dynamic aspects of the uptake and washout of brain activity. Page 1964

Intratumoral Distribution of Fluorine-18-Fluorodeoxyglucose In Vivo: High Accumulation in Macrophages and Granulation Tissues Studied by Microautoradiography

By using micro- and macroautoradiography, the cellular localization of [¹⁸F]FDG and ³H-Dg in vivo tumors transplanted subcutaneously in mice were studied 1 hr after intravenous injection..... Page 1972

Metabolic Design of Combination Therapy: Use of Enhanced

Fluorodeoxyglucose Uptake Caused by Chemotherapy

MCF7 cells were studied with ¹⁴C-FDG to determine the time course of changes in uptake after chemotherapy. Page 1981

Comparison of Technetium-99m-Glucarate and Thallium-201 for the Identification of Acute Myocardial Infarction in Rats

Serial injections and images were recorded over 10 days following ligation of the left anterior descending coronary artery of a rat. Distribution of ^{99m}Tc-glucarate was compared to regional myocardial perfusion monitored with ²⁰¹Tl. Findings on the images were compared to histological changes in the myocardium..... Page 1988

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Two new antimyosin imaging agents experimentally shown to potentially improve dosimetry, shorten time from injection to imaging or decrease nonspecific cell binding were evaluated in a primate cardiac transplant model..... Page 1994

Experimental and Clinical Analysis of the Characteristics of a Chimeric Monoclonal Antibody, MOv18, Reactive with an Ovarian Cancer-Associated Antigen

The in vivo binding characteristics of the chimeric MOv18, both as IgG and F(ab')₂ fragments, were compared to those of the parental murine Mab. Additionally, the pharmacokinetics and biodistribution of m- and c-MOv18 in a human ovarian cancer xenograft model were studied..... Page 2000

Pretargeted Immunoscintigraphy: Effect of Hapten Valency on Murine Tumor Uptake

By using bivalent "Janus" haptens with an apparent enhanced affinity for antibodies, a pre-targeted method of radioimmunoscintigraphy was evaluated..... Page 2006

Diffuse Thallium-201-Chloride Uptake in Hypermetabolic Bone Marrow Following Treatment with Granulocyte Stimulating Factor

A patient, presenting with AIDS and Kaposi's sarcoma developed severe leukopenia that was treated with granulocyte stimulating factor. Following chemotherapy, the tumor was negative for thallium uptake, but bone marrow uptake was seen. . . . Page 2014

Abnormal Intracerebral Thallium Localization in a Bacterial Brain Abscess

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An Autonomously Functioning Thyroid Carcinoma Associated with Euthyroid Graves' Disease

A thyroid scan of a 39-yr-old man with thyroid carcinoma revealed a hot nodule corresponding to the location of a papillary carcinoma, which remained substantially unchanged after T3 administration. . . . Page 2024

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Phantom studies were employed to determine if new high-resolution, three-headed SPECT is suitable for the simultaneous acquisition of ^{99m}Tc and ¹²³I. . . . Page 2030

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The "Well Tempered" Diuretic Renogram: A Standard Method to Examine the Asymptomatic Neonate with Hydronephrosis or Hydroureteronephrosis

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Diffuse Abdominal Uptake of Technetium-99m-Methylene Diphosphonate in a Patient on Continuous Ambulatory Dialysis During Bone Scintigraphy

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