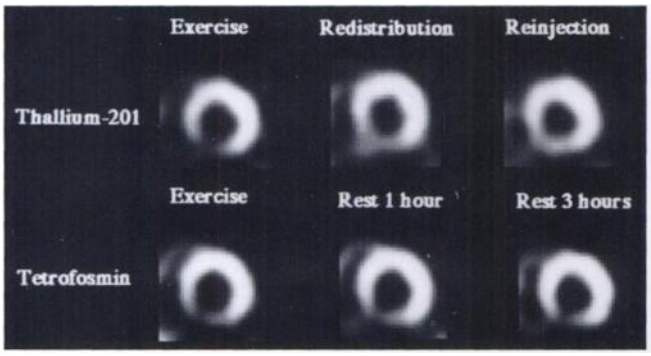
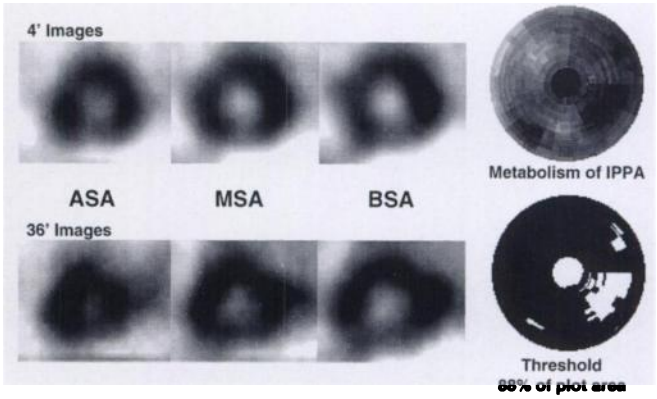
Cardiovascular Nuclear Medicine 1995: II



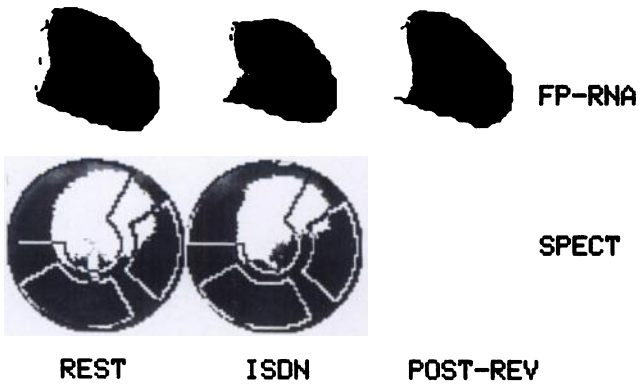
Short-axis tomograms from a patient with reversible ^{201}Tl and nonreversible ^{99m}Tc-tetrofosmin defects. See pages 1961–1967.



Delayed IPPA metabolism is shown in the anteroseptal wall of a patient with two-vessel disease. See pages 1987–1993.

For the second time in 1995, an issue of the *Journal* is dedicated to cardiovascular nuclear medicine. This reflects the continued growth of nuclear medicine techniques in the management of patients with cardiovascular disorders and underscores the improved insights into the pathophysiology of these diseases. Efforts to organize subject content in an area such as this must revert to a multi-tiered matrix chart that reflects the complexity and multidisciplinary nature of the subject.

Reports can be classified by the radiolabeled tracer used: ^{201}Tl; ^{99m}Tc-labeled sestamibi, tetrofosmin, Q12 or red blood cells; ^{123}I-labeled MIBG or fatty acids; PET tracers such as [^{18}F]FDG, ^{11}C-acetate or ^{13}N-ammonia; or ^{111}In-labeled monoclonal antibodies. Alternately, a classification could be based on clinical diagnosis: coronary artery disease (CAD), myocardiopathy, congenital heart disease, acquired valvular disease or the cardiac manifestations or systemic disease. In turn, these diagnoses themselves may be categorized by clinical indication for the nuclear medicine procedure; studies about characterizaton of the natural history, the initial and long-term response to a variety of therapies, comparison of the efficacy of various management regimens, determination of myocardial status (i.e., ischemic, viable, hibernating, stunned or infarcted myocardium). Finally, classification can be made based on technology or type, such as a prospective analysis of a particular technique in a specific clinical application. This can serve to validate the technique or to characterize the clinical problem. Another study may evaluate the pathophysiology of a clinical entity either at a specific point in the natural history correlated with clinical status at that time, or the study may indeed characterize the natural history of the pathophysiology during the course of a disease. Other studies may examine the cost-effectiveness of a nuclear medicine technique compared to other techniques or in determining the clinical outcome. Technical studies describe new or improved acquisition methods or analysis of nuclear medicine procedures.



FPRNA and MIBI perfusion polar image (SPECT) of a patient with single-vessel disease. See pages 1994–2000.

Whereas the *Journal* can only group these studies in one fashion or another, readers would do well to appreciate the scope and affect of these studies, which are testament to the complexity of these issues and the need for continued closed interaction and mutual dependancy of those involved in the clinical application of these techniques, and those involved in providing and improving the technical foundation of these studies. Successful clinical utilization of these techniques is dependent on the continuous excellence in the contemporary practice and growth of cardiovascular nuclear medicine.

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