

Recent Advances in Nuclear Cardiology—2025

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We are excited to publish the June issue of the *Journal of Nuclear Medicine Technology*, which focuses on nuclear cardiology. For years, nuclear cardiology felt stagnant. However, recent advancements in technology and tracers have revitalized its potential. This issue is dedicated to exploring innovations that are transforming our understanding and management of cardiac diseases.

The continuing education articles in this issue reflect a wide range of nonmyocardial perfusion cardiac imaging. Wechalekar et al. provide insight into assessing cardiac sarcoidosis using ^{18}F -FDG PET/CT, a critical tool for diagnosing and monitoring this complex condition (1). Diane Soulek presents a compelling, educational case series on unmasking sarcoidosis with PET/CT (2). To accompany these two continuing education articles, a practical protocol for cardiac sarcoidosis is provided (3).

Peacock et al. discuss the standardization of cardiac metaiodobenzylguanidine (MIBG) imaging for sympathetic dysfunction, a technique that has shown promise in detecting early autonomic involvement in diseases such as dysautonomias, amyloidosis, diabetes mellitus, Parkinsonian syndromes, heart failure, and myocardial ischemia or infarction (4). To accompany this discussion, a practical protocol for MIBG is provided (5). For the final continuing education article, Geoff Currie provides practical guidance on recognizing and responding to patients with acute cardiac conditions (6).

A scientific cardiac article examines the use of single-versus dual-time-point imaging for transthyretin cardiac amyloidosis, utilizing [$^{99\text{m}}\text{Tc}$]Tc-pyrophosphate. This study highlights the evolving role of nuclear cardiology in diagnosing and managing amyloidosis, a condition that often presents with nonspecific symptoms (7).

Two teaching case studies are featured in the June issue. The first examines high-sensitivity troponin elevation in a young woman with typical chest pain, highlighting the complexities of diagnosing cardiac conditions and the importance of integrating advanced imaging techniques into clinical decision-making (8). The second case study highlights the subtle findings of right ventricular uptake and transient ischemic dilatation, which are crucial for identifying three-vessel coronary artery disease (9).

Additionally, there are two brief articles with practical tips for preventing and recognizing patient motion on cardiac SPECT and PET myocardial perfusion imaging (10,11).

As we move forward in this dynamic field, it is clear that nuclear cardiology is no longer confined to traditional myocardial perfusion imaging. The articles in this issue

demonstrate how state-of-the-art technologies and methodologies are expanding our capabilities to assess and treat a wide range of cardiac conditions.

Finally, this issue also includes a Letter to the Editor (12) and a U.S. Technegas Practical Protocol (13). The Technegas Protocol published in the March 2025 issue reflected the procedure practiced worldwide for over two decades. However, the Food and Drug Administration–approved protocol for use in the United States includes subtle changes that required clarification for sites in the United States that are instituting the Technegas protocol in their clinical practice. Our thanks to Tina Beuhner for bringing these changes and corrections to our attention and for sharing her expertise in developing the U.S. Technegas Protocol.

When time allows, be sure not to miss the additional scientific discussions and teaching case studies included in this issue.



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