ASNC, IAC and SNMMI Call for Field to Focus on Radiation Dose Optimization in Nuclear Cardiology

NOVEMBER 2016 | Working in concert, the American Society of Nuclear Cardiology (ASNC), the Intersocietal Accreditation Commission (IAC)’s Nuclear/PET accreditation division and the Society of Nuclear Medicine in Molecular Imaging (SNMMI) are mandating optimized radiation doses in conjunction with the nuclear cardiology studies (i.e., myocardial perfusion imaging) performed throughout the United States and beyond.

These efforts come in response to recently published research\(^1\)\(^2\) demonstrating that adherence to clinical nuclear imaging guidelines for reduced patient radiation exposure is variably implemented, resulting in administration of higher doses than necessary for some patients undergoing myocardial perfusion studies.

In February 2016, ASNC published guidelines for myocardial perfusion SPECT imaging, *ASNC Imaging Guidelines for SPECT Nuclear Cardiology Procedures: Stress Protocols and Tracers*, which include a chart entitled “Current SPECT Myocardial Perfusion Imaging Protocols: Recommended Radiopharmaceutical Activities and Their Corresponding Radiation Effective Doses.” These recommendations provide guidance for practitioners and are based on ASNC’s guiding principle of performing the most appropriate study that provides the highest quality data to aid in medical decision-making and minimizes risks to patients. Dose reduction strategies based on weight-based radiotracer dosing, thoughtful selection of radiotracer, stress-only imaging when appropriate, software innovations, state-of-the-art SPECT systems and utilization of PET for myocardial perfusion imaging are all methods supported by ASNC to achieve quality cardiac imaging at the lowest radiation exposure.

“ASNC is committed to supporting nuclear cardiac imaging labs’ use of the lowest radiotracer dose that maintains diagnostic image quality, in conjunction with application of Appropriate Use Criteria (AUC) and the use of count recovery software for general SPECT cameras, new solid state SPECT cameras, and PET to provide the right test for the right patient,” said Brian G. Abbott, MD, FACC, MASNC, ASNC President.

To ensure that facilities seeking nuclear cardiology accreditation focus their awareness on the patient dose they are administering, the September 2016 published revision to the *IAC Standards and Guidelines for Nuclear/PET Accreditation* is inclusive of required administered dose ranges as recommended by the 2016 ASNC guidelines. In accordance with the IAC’s mission of *Improving health care through accreditation*®, the IAC Nuclear/PET Board of Directors has made the decision to mandate specific dose ranges for myocardial perfusion imaging studies to decrease radiation exposure while maintaining image quality, thus ensuring patient safety.

Scott D. Jerome, DO, FACC, FASNC, FSCCT, IAC Nuclear/PET President, said, “Our ultimate goal is to ensure that nuclear cardiology facilities are guided to administer the lowest dose possible that provides optimal imaging results for patients referred for myocardial perfusion imaging studies.”

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Speaking on behalf of the SNMMI, President Sally W. Schwarz, MS, RPh, BCNP, stated, “Working together, we can more effectively ensure that health care providers meet accreditation requirements and follow dose guidelines for nuclear cardiology. The goal is to keep radiation exposure as low as is reasonable.” Frederic H. Fahey, DSc, FSNMMI, who serves on SNMMI’s Dose Optimization Task Force, added, “Accreditation requirements and dosing guidelines emphasize both patient safety and quality images. Our focus must always be on providing the highest quality care in the safest manner possible.”

About ASNC

ASNC is the recognized leader in quality, education, advocacy and standards in cardiovascular imaging, with nearly 4,000 members worldwide. ASNC is the only society dedicated solely to advocacy issues that impact the field of nuclear cardiology and is working with success to influence regulations to fight onerous private health plan policies – advertising reimbursement declines and fighting for improved payment and coverage. ASNC is dedicated to continuous quality improvement, education and patient-centered imaging, illustrating the ongoing commitment as a leader in the field of nuclear imaging and improving patient outcomes. ASNC establishes standards for excellence in cardiovascular imaging through the development of clinical guidelines, professional education, advocacy and research development. ASNC’s members are comprised of cardiologists, radiologists, physicians, scientists, technologists, imaging specialists and other professionals committed to the science and practice of nuclear cardiology. For more information, visit www.asnc.org.

About the IAC

A nonprofit organization highly regarded for its accreditation programs since 1990, the IAC is committed to its mission of Improving health care through accreditation®, through a rigorous peer review process. The IAC provides accreditation programs for vascular testing, echocardiography, nuclear/PET, MRI, diagnostic CT, dental CT, carotid stenting, vein treatment and management and cardiac electrophysiology. To date, the IAC accrediting divisions have granted accreditation to more than 14,000 sites throughout the U.S., Canada and Puerto Rico. IAC accreditation is widely respected within the medical community, as illustrated by the support of more than 40 medical societies. Varying per modality and practice setting, IAC accreditation is required in some U.S. states and regions, by the Centers for Medicare and Medicaid Services (CMS) and by numerous private insurers. For more information, visit intersocietal.org.

About the SNMMI

SNMMI is an international scientific and medical organization dedicated to raising public awareness about nuclear medicine and molecular imaging, a vital element of today’s medical practice that adds an additional dimension to diagnosis, changing the way common and devastating diseases are understood and treated and helping provide patients with the best health care possible. SNMMI’s more than 17,000 members set the standard for molecular imaging and nuclear medicine practice by creating guidelines, sharing information through journals and meetings and leading advocacy on key issues that affect molecular imaging and therapy research and practice. For more information, visit snmmi.org.

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References


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