Radiation and Musculoskeletal Safety

As interventional cardiologists, we are tasked with providing the best care to our patients, oftentimes while putting our own health and safety at risk. Our exposure to radiation is much higher than the average person. Anyone who has operated in the cath lab will also agree that wearing a lead apron is, to put something so heavy very lightly, not enjoyable. After an hours-long procedure, much of it spent standing and craning over a patient, the apron's weight can be acutely felt—the lead often leaves a calling card of aches and pains that may persist long after we leave the procedure lab. Of course, we wear these hefty aprons for a good reason—to shield ourselves from the radiation that is omnipresent in our work environment. But concerningly, rates of cancer and orthopedic injuries remain disproportionately high among cath lab operators.

This issue of *Cardiac Interventions Today* tackles the question that has been on many of our minds: How can hospitals and clinical guidelines adapt to meet the underdiscussed health and safety needs of physicians while preserving quality and efficiency of care? Within these pages, our colleagues offer their insights and propose actionable mitigation strategies.

To begin, Taishi Hirai, MD; Jeremy D. Rier, DO; and Rhian E. Davies, DO, walk us through the state of radiation protection systems in 2025, summarizing how we can use these tools to balance safety, comfort, and operational efficiency in this high-risk environment. Then, Allison Dupont, MD, and James Hermiller, MD, share findings from a recent Society for Cardiovascular Angiography and Interventions survey on occupational hazards and the efforts the society is making to prioritize physician health and safety.

Ajar Kochar, MD; Sheila Sahni, MD; and William A. Gray, MD, reflect on radiation and musculoskeletal (MSK) safety in the real world, including the historical lack of awareness regarding radiation and MSK issues and what is turning the tide, the hospital's role in ensuring staff safety, and ideal next steps. We also have an interview with Kenneth Rosenfield, MD, who shares his personal story of MSK injury as well as advice for alleviating the burden of lead and the role of administrators and industry.

Our Literature Highlights article summarizes a recent publication that found lower operator radiation exposure with a left radial versus a hyperadducted right radial artery approach, with study authors Richard Casazza, MAS; Arsalan T. Hashmi, MD; Bilal Malik, MD; and Jacob Shani, MD, participating in a Q&A on their findings.

Elsewhere in this issue, we cover hypertension (HTN) therapy, with a special focus on renal denervation (RDN) in the mainstream. Tiffany C. Randolph, MD; Michael J. Bloch, MD; and Anna K. Krawisz, MD, discuss keys to successfully starting a dedicated practice, advice for developing referrer relationships, tips for reaching patients, and more.

Then, Catherine Vanchiere, MD; Tayyab Shah, MD; Debbie L. Cohen, MD; Jay Giri, MD; Brian Fulton, MD; and Taisei Kobayashi, MD, provide us with an update on the state of reimbursement for RDN in the United States, emphasizing that for RDN to positively impact patients, it must be economically feasible to develop high-quality RDN programs.

Finally, Felix Mahfoud, MD, MA; Ajay J. Kirtane, MD; and Andrew Sharp, MD, reflect on the next generation of RDN trials and their potential endpoints, how to handle data collection, and new applications beyond renal.

In our Today's Practice column from MedAxiom, Ginger Biesbrock, DSc, explores how strategic staffing in ambulatory surgical centers is crucial for high-quality, cost-effective interventional cardiology care.

Closing out this issue is an article from Mehmet Çilingiroğlu, MD; Konstantinos Marmagkiolis, MD; and Cezar Iliescu, MD, on the role of interventional cardiologists in cardio-oncology, which appears in our digital exclusive issue *Cardio-Oncology in the Cath Lab*.

This issue puts a deserved spotlight on the need to recognize and address shortcomings in workplace safety for interventional cardiologists. Our colleagues harness data from recent studies and draw from their own embodied experiences in an effort to recenter physician well-being, which is too often neglected in discourse about improving and advancing our field. Separately, this issue depicts RDN, a promising future for a novel procedure to treat uncontrolled HTN, and emphasizes the importance of optimal staffing for the best provision of care. Together, there is much to learn from our fellow clinicians as we collectively strive for positive progress in the interventional cardiology space. ■

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