Personalizing Carotid Revascularization



It is an exciting time in the field of carotid artery revascularization, with new data across a variety of therapies, innovative platforms emerging, and improved access to care through unrestricted Centers for Medicare & Medicaid Services (CMS) coverage. There has perhaps been more change

and advancement in the past handful of years than in the decade preceding them. We have seen growth in the utility and study of transcarotid artery revascularization (TCAR), with steadfast progress in the development of this technique and its associated technologies, as well as renewed interest in transfemoral carotid artery stenting (TF-CAS). After a period of relative slow-down in TF-CAS related to the prior CMS coverage limitations, the emergence of new platforms with strong clinical data support and a clearer path to providing these procedures on equal footing with TCAR and carotid endarterectomy has been a strong contributing factor in the vitality seen across the carotid field.

With the opportunity to advance each of these therapies comes a great deal of responsibility to our current and future patients. We must continue to improve our skills and teamwork and our steadfast scientific pursuit of outcomes data to answer any open questions. As such, the theme of this edition—and for the foreseeable future of all carotid revascularization efforts—is collaborative determination of the right therapy for the right patient, performed by the right operator.

This issue opens with a dynamic roundtable discussion featuring the insights of Drs. Sonya Noor, Adnan Siddiqui, and Peter Soukas on the nuanced decision-making involved in the treatment of carotid artery disease. Together, they explore how patient selection, lesion characteristics, and evolving treatment algorithms shape individualized therapeutic strategies in contemporary practice.

Next, we review the current and emerging device landscape for both TF-CAS and TCAR in the United States, with detailed descriptions of each of the current platforms on the market.

Don Heck, MD, provides a timely refresher on the 2023 expansion of the National Coverage Determination (NCD) for carotid artery stenting, detailing the updated

coverage parameters and their implications for procedural choice, shared decision-making, and imaging protocols—key considerations that continue to influence real-world adoption and access to care. Rounding out our feature, Kenneth Rosenfield, MD, offers practical insight into operator readiness—addressing what is required for clinicians to achieve proficiency in TF-CAS and where the responsibility for training and competence ultimately lies.

Outside the cover focus, the Endovascular Today editors worked with leaders in the field of interventional oncology, where innovation continues to redefine treatment possibilities. Eric Wehrenberg-Klee, MD, and Suvranu Ganguli, MD, guide a tour of the latest clinical research shaping the specialty—spotlighting key trials such as DRAGON1, LEAP-012, and #HOPE4LIVER—and interpreting their collective impact on patient outcomes and practice direction. Next, Robert J. Lewandowski, MD, and Beau Toskich, MD, discuss their recently coauthored review examining radiation segmentectomy, offering valuable insights into its evolving role within the broader landscape of liver-directed therapies. Finally, Edward Kim, MD, and colleagues recount their collaborative experience training Ugandan physicians at the Kyabirwa Surgical Center in the use of microwave ablation to manage hepatocellular carcinoma. Their work underscores the importance of knowledge exchange and skill transfer in expanding access to advanced therapies worldwide.

We close the issue with an interview with Saher Sabri, MD, who shares his insights on the advocacy priorities shaping the future of interventional radiology.

Despite the marked progress resulting from many years of hard work, commitment, and dedication to science across the vascular disciplines, we are nowhere near a point of complacency. We must continue to compare our experiences, generate new questions to study, listen to and educate one another, and better understand our patients' needs and our abilities to meet them. In that light, we look forward to the presentation of the CREST-2 data at the VEITHsymposium in a few short weeks—undoubtedly a whole new round of questions will emerge from that experience. I look forward to learning from your insights as this exciting field continues to develop.

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