

CAS Crossroads

As 2009 comes to an end, one thing is certain: 2010 will be an interesting year for carotid artery stenting (CAS). Although the evolving experience and outcomes in CAS have proven it to be an excellent option for treating appropriately selected carotid stenosis patients, patient access to CAS continues to be restricted, limiting the potential to benefit those at high surgical risk.

We have seen improvements in device design and technical skill, and, perhaps most importantly, a shift in approach that selects patients likely to benefit most from CAS, and uses endarterectomy as a complementary—and not competitive—therapy. The subtleties in the many subsets deserve continued scrutiny and study, and the interventional community has shown its commitment to properly select patients for these procedures. For patients, physicians, and industry alike, it is in our best interest to find the most ideal uses of these devices and stay within those boundaries. But, despite encouraging outcomes that continue to show great benefit in those patients—and even continue to improve—significant limitations have been placed on the performance of the procedure in many countries.

Medicare reimbursement in the United States has not been expanded to cover the larger patient base that many experienced clinicians believe can and do benefit from stenting as opposed to surgery. Conclusions from trials with demonstrated design and conduct limitations have influenced these decisions in the United States and abroad, as well as had an impact on referrals. It is important to note that numerous trials with more patients that more closely resemble current clinical practice have shown greater benefit, and we are also awaiting the highly anticipated release of the CREST data. In short, one would be hard-pressed to find a peripheral procedure that has been placed under as much scrutiny as has CAS, and there is more on the horizon. Additionally, technological advancements continue, and there remains the prospect of even better results. In this issue of *Endovascular Today*, we have invited an esteemed and vocal group of physicians to contribute their thoughts on all of these topics and more.



Christopher J. White, MD, opens our feature with a detailed history of the Centers for Medicare & Medicaid Services' coverage of CAS and discusses the current challenges interventionists and industry face as a result of the most recent coverage decision. Next, I take a close look at several of the trials studying CAS and examine issues in outcome reporting that can complicate data interpretation. Gary S. Roubin, MD, PhD, follows with a review of the CREST trial, discussing its strengths and limitations and how the results will affect endovascular therapy. Sumaira Macdonald, MBChB (Comm.), FRCP, FRCR, PhD, explores the rationale and evidence base for CAS in asymptomatic patients. Mark H. Wholey, MD, then discusses technological improvements for CAS, including developments in stent design, embolic protection, access techniques, and controlled drug elution. Subbarao Myla, MD, FACC, FSCAI, closes our feature with an analysis of aortic arch types and reviews several carotid access techniques used in treating this anatomy. I would like to take this opportunity to personally thank them for their excellent contributions to this edition.

We also have several interesting contributions outside of our carotid feature, beginning with a challenging case in which Wilmo C. Orejola, MD; Elie M. Elmann, MD; and Gregory T. Simonian, MD, describe how endovascular repair and coil embolization were used to treat the spontaneous rupture of a neurofibroma in patient's chest.

In our Today's Practice column, Alex Powell, MD, and Ramon Quesada, MD, share their perspectives on the need for multispecialty collaboration and describe how interventionists at their facility integrate new devices and techniques to treat patients. We conclude this issue with an interview with Anton N. Sidawy, MD, MPH, President of the Society for Vascular Surgery, who discusses his goals for the society's programs, and how tabled legislation could affect abdominal aortic aneurysm screening.

We hope you find this issue of *Endovascular Today* to be an informative and stimulating update on the state of a very important procedure for many of our patients. ■

William A. Gray, MD
Guest Chief Medical Editor