

Meeting the Challenge

By its very nature, vascular intervention is a field in which we encounter a relatively large amount of difficult cases. Each patient has a specific set of existing conditions and unique anatomical features, and often these elements combine to provide a very challenging scenario for the treating physician. However, the more challenging a case proves to be, the greater the opportunity we have to learn from it. With this in mind, we have asked a group of the world's top endovascular specialists to each share one of their most challenging cases. We are fortunate to have 14 cases describing unique disease presentations in various anatomical locations, and highlighting personalized approaches using combinations of current technologies. Hopefully, we can all learn from what did and did not work in these cases, so that we can be better prepared when we encounter similar presentations.

To begin our cover feature articles, Lee R. Guterman, PhD, MD, describes a challenging vertebrobasilar revascularization and notes that a distal protection device will prove useful in the future as intracranial revascularization procedures increase in number. James D. Joye, DO; Omar Wani, MD; and Samir Bhatt, MD, describe a complex carotid intervention in a patient with a bicarotid trunk and anomalous origin of the right subclavian artery.

Peter Lin, MD, and Joseph S. Coselli, MD, describe a case of a symptomatic ascending aortic pseudoaneurysm that was successfully treated using components of abdominal endografts via a left carotid artery approach. They warn that, because of the lack of approved endovascular devices for ascending aortic aneurysm repair, clinicians may have to rely on endograft components designed for abdominal aortic aneurysm to treat lesions in the ascending aorta. Lefeng Qu, MD, PhD, and Dieter Raithe, MD, PhD, present a concomitant endovascular exclusion of a contained ruptured aortic arch aneurysm with a cartridge-loaded stent graft and supra-aortic debranching.

Manish Mehta, MD, and colleagues describe complications that arose after endovascular thoracic aneurysm repair, requiring emergent intra-arterial thrombolysis and middle cerebral artery angioplasty to treat ischemic stroke resulting from the endovascular repair. Joost A. van Herwaarden, MD, PhD, and Hence J. M. Verhagen, MD, PhD, et al describe an endoluminal repair of an aorto-esophageal fistula and the ensuing series of complications. They warn that a giant Palmaz stent can completely infold due to the enormous

forces that are present in the dynamic environment of the thoracic arch.

Ross Milner, MD, describes treating a mycotic ascending aortic aneurysm a highlights two points: the use of isolated endovascular therapy to treat an ascending aortic pseudoaneurysm in a heart transplant recipient, and the possibility of endovascular therapy to provide a durable result in an infected field. R. M. Walkden, MRCS, FRCR; Rob A. Morgan, MRCP, FRCR; Ian Loftus, MD, FRCS; and Matt Thompson, MB, FRCS, present a case of chronic aneurysmal aortic dissection in a patient with Marfan syndrome. Kate Pfaff, BS; Qingsheng Lu, MD; and Roy K. Greenberg, MD, present a case of persistent gastrointestinal bleeding in which a branched endograft effectively restored perfusion of both internal iliac arteries.

James A. M. Smith, DO, shares a challenging case from the early days of renal stenting, stressing that one must consider the alternatives to treatment and understand the natural history of atherosclerotic RAS. James F. McKinsey, MD, provides two case studies using a retrograde approach with a combination of different devices to treat recurrent lower-extremity ischemia. Tony S. Das, MD, FACC, presents a patient with chronic occlusion of the right SFA and distal reconstitution at the distal popliteal artery.

He warns that, as critical limb ischemia often presents with occlusive disease, access issues often need to be resolved before recanalization can be attempted. Bulent Arslan, MD, and Alan H. Matsumoto, MD, present a case of catheter-directed therapy in the presence of an IVC filter, a clinical scenario with a transient contraindication to anticoagulation necessitating placement of the filter, with ensuing thrombosis.

In addition to our cover focus, we also have a three-article update on varicose vein therapy, featuring perspectives from Steve Elias, MD, Ari D. Soffer, MD, and Ronald Bush, MD, FACS. In our Techniques department, Zvonimir Krajcer, MD, describes a unique aortic banding procedure that he developed to treat a type 1 endoleak after endovascular abdominal aortic aneurysm repair.

Our issue closes with a featured interview with Ziv Haskal, MD, a respected interventional radiologist with a great deal of insight based on his extensive research and clinical experience. ■



Barry T. Katzen, MD, Chief Medical Editor