Although the endovascular treatment of aortoiliac disease is well established and associated with high procedural success and favorable long-term outcomes, there continues to be room for improvement. In particular, the treatment of complex aortoiliac bifurcation disease, thrombotic occlusion, and TASC C and D lesions remains challenging. The techniques for the treatment of complex aortoiliac disease continue to evolve, and new modalities offer the promise of improved outcomes. In this issue of *Endovascular Today*, we discuss some of these innovative approaches to this common clinical problem.

In the current era, chronic total occlusions (CTOs) in the iliac arteries can often be addressed nonsurgically, but good technique is critical to optimize the chances of success and to minimize complications. Dierk Scheinert, MD, and Andrej Schmidt, MD, share their crossing techniques for aortoiliac CTOs, including a look at different types of occlusions, access strategies, and currently available tools.

The optimal use of newer imaging modalities can also improve your chances of success with aortoiliac disease. José M. Wiley, MD; Prakash Krishnan, MD; Elias Sanidas, MD; Jason C. Koviac, MD, PhD; and George Dangas, MD, PhD, review the use of newer imaging modalities for disease in this vascular bed. Although digital subtraction angiography remains the gold standard, they highlight the important role that CT angiography and intravascular ultrasound can play in procedure planning.

The stents available for use in the iliac arteries have improved significantly over the years. Now, covered stents are playing an increasing role. My colleagues Andrew T. Kwa, MD; David L. Dawson, MD; and I review for you the potential role of covered stents for treating aortoiliac disease. These devices are certainly useful to treat complications of angioplasty, but the ePTFE can also serve as a barrier to neointimal ingrowth and may help reduce the risk of restenosis, thereby reducing the need for repeat intervention in the iliac arteries.

Our cover story also includes an interview with Amir Motarjeme, MD, who discusses indications and decision making in the use of iliac thrombolysis. The approach to acute occlusion or thrombus containing lesions in the iliac arteries can be challenging, and Dr. Motarjeme has taught us all a lot about the appropriate use of lytic therapy. He shares who he believes is the ideal candidate and what his strategies and techniques are for this treatment.

My colleagues Akhilesh K. Jain, MD; Aravinda Nanjundappa, MD, RVT, MBA; Albier Moussa, MD; Robert S. Dieter, MD, RVT; and I highlight an alternative approach to the treatment of thrombotic lesions in the iliac arteries. They describe the use of embolic capture angioplasty with the Angioslide Proteus balloon for two cases of acute iliac occlusion.

In addition, this issue has other challenging case reviews by Richard Pin, MD, RPVI; Keith Jones, MD, and Ross Milner, MD; Nabeel R. Rana, MD, Jennifer L. Ash, MD, and Syed M. Hussain, MD. These cases highlight a variety of techniques and treatment options for disease in this vascular bed.

This month, we also have a subfeature on varicose vein therapy. Steve Elias, MD, FACS, FACPh, explores how to set realistic expectations for your venous disease patients to ensure that they are pleased with their treatment results. Jose I. Almeida, MD, FACS, RPVI, RVT, discusses nonthermal technology for saphenous vein ablation, including phlebectomy and cyanoacrylate adhesives. Our Techniques department features an article by Bibombe P. Mwipatayi, MMed (Surg), FCS (SA), FRACS; Roshan Nair, MBBS; Shannon Thomas, BSc, MBBS; and Vikram Vijayan, MRCs, FRCS, on the indications for using custom-made grafts with inverted contralateral limbs.

We close our April issue with an interview with Jacques Busquet, MD, President of the International Society of Endovascular Specialists. He discusses the society’s goals, its impact, and his experiences as an interventionist practicing in France.

We hope this issue will generate discussion in your practice about interventional options for aortoiliac disease, and as always, we welcome your feedback.

John R. Laird, MD, Chief Medical Editor