

# Common Ground and Controversy

Dialysis access is the lifeline for most patients with end-stage renal disease. The goal of creating and maintaining access is simple: to provide a route for safe and effective dialysis. However, decisions that lead to the selection and maintenance of dialysis access are often complex and controversial. In this issue, *Endovascular Today* brings you some of the latest and most informative articles on dialysis access, ranging from the broadest overview (the global perspective) to the truly inner depths (the peritoneal surface).

Our annual dialysis access edition opens by addressing these global differences with an interview with Ingemar A. Davidson, MD, PhD. Dr. Davidson is a transplant/dialysis access surgeon who trained and practiced in Sweden, then immigrated to the United States early in his career. He has followed his passion for dialysis access around the planet and shares his insight into both positive and negative factors that currently affect patient outcomes wherever dialysis is practiced.

It is universally agreed that surveillance of dialysis access improves outcomes. Or is it? Thomas M. Vesely, MD, writes about the potential benefits of measuring intra-access blood flow for vascular access surveillance and also explains why some practitioners argue that surveillance has not yet been proven effective. Beyond the controversy that surrounds the effectiveness and benefit of surveillance, he explains why surveillance may actually cause more harm than good.

One of the arguments against surveillance is that despite its ability to detect a failing hemodialysis access, the techniques used for maintenance and salvage of hemodialysis access circuits are not very durable. Although metal stents have not substantially improved upon angioplasty results, stent grafts appear to hold promise. Dheeraj Rajan, MD, FRCPC, FSIR, lists the pros and cons of the current stent graft technology when used in hemodialysis access circuits and reviews contemporary clinical trials.

During the past decade, a great deal of attention has been focused mainly on hemodialysis. It is generally

acknowledged that peritoneal dialysis is underutilized and that its prevalence has steadily declined. However, there is renewed interest in peritoneal dialysis, for both medical and financial reasons, as discussed by Jack Work, MD. He

advocates for a peritoneal dialysis—first approach for treating patients who are nearing end-stage renal failure. Furthermore, he explains that peritoneal dialysis should not be competing with hemodialysis but rather be a complementary strategy in the treatment of end-stage renal disease.

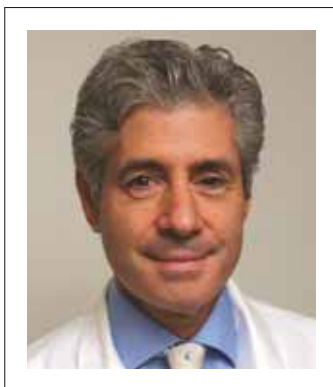
The final dialysis access topic looks at a “blue sky” approach for creating a hemodialysis access, in which bioengineered conduits are “grown” and then implanted as arteriovenous conduits.

Todd N. McAllister, PhD, and colleagues

explain that tissue-engineered vascular grafts could be the next step in ensuring long-term hemodialysis access patency, as well as low complication and reintervention rates.

Beyond dialysis access, there are many other topics discussed in this issue, including a Vessel Update on the superficial femoral artery by Srinivas Iyengar, MD, FACC, a Stroke Update by Marilyn M. Rymer, MD, who shares her view on why it is better in the long term to provide early intervention for patients with acute ischemic stroke, and case examples of coding for lower extremity revascularization by Katharine L. Krol, MD, FSIR, FACR. To close the issue, we have interviewed Lee R. Guterman, PhD, MD, who shares his insights on a wide range of hot topics in the field of endovascular and neurological interventions.

As the invited editor of the annual issue on dialysis access, I sincerely hope you enjoy and learn from the articles that have been contributed by an outstanding group of authors. ■



A handwritten signature in dark ink, reading "Bart L. Dolmatch".

Bart L. Dolmatch, MD  
Guest Chief Medical Editor