

Key Questions in Chronic Venous Occlusion and Iliocaval Reconstruction

Insights on improving CVO diagnosis, intervention, and long-term patient outcomes.

With Stephen A. Black, MD, FRCS(Ed), FEBVS



Chronic venous occlusion (CVO) remains underdiagnosed and undertreated in many patients. What are the biggest gaps and opportunities you see in recognition and referral patterns?

The referral pathway for patients is still fragmented, as patients with venous disease present to multiple different specialists and teams—a hematologist, wound care specialist, or ulcer clinic, for example. Over many years of onward referral to vascular specialists being met with a dismissive answer, these pathways become even worse. For instance, it is surprising how many patients with a leg ulcer still do not ever undergo a venous assessment. Correcting this requires education of patients, clinicians, and management teams. In addition, as new treatments improve, we can hopefully build more confidence in the process.

Where do clinicians still struggle most with patient selection decisions?

There are still large groups of clinicians who don't see the value in treating venous disease and remain dismissive of these patients relative to those with arterial disease. This is largely due to lack of appreciation of the treatment options. I think if we can continue to develop robust evidence-based treatment pathways and lobby for patients, this will change.

What technical challenges continue to make ilio caval reconstruction one of the more demanding venous interventions?

Crossing and inflow are the two challenges. Crossing can be time consuming and tricky, and we have limited

tools. As with all CVO, inflow remains the ultimate challenge because we don't really have a great way to measure the flow or any real, consistent options to improve it if it is poor.

Which patient-reported outcomes do you prioritize when evaluating procedural success?

Simply, do patients feel better. The patients in whom this really works forget about their leg! They get on with their lives. The patients who are struggling spend all day wondering how they are going to elevate their leg and reduce the pressure.

What unanswered questions remain regarding anticoagulation or antiplatelet therapy after ilio caval reconstruction?

We still have not established the optimal regimen for treatment that balances thrombosis prevention and bleeding risk. The role of long-term multidrug therapy has not been established, and it is certainly not clear if antiplatelets add benefit. There are several consensus statements, but the number one question we get at meetings is what anticoagulation we should give. This likely needs a trial of some sort. A Swiss group did publish a randomized controlled trial in this area, but that remains the only one.

Are there still major unmet device needs in the venous space—whether related to stents, thrombectomy, intravascular ultrasound, or adjunctive tools?

There are multiple unmet needs. Stents are still bare metal, and balloons have not evolved! In simple terms, we are still at the plain old balloon angioplasty

phase. We need evolved stents (drugs or bioabsorbable), improved balloons, better crossing, and a method to assess inflow.

Ultimately, the “stent maintenance” aspect also needs to grow. We have seen some progress, but there certainly is an absolute need for techniques to manage in-stent stenosis and occlusion, as well as crossing and debulking.

Finally, we need something to help with the diagnostic process to determine if someone needs a stent in the first place. We are seeing some development here with the VenaSense catheter (Vector Vascular), which I think is very interesting.

Do you believe current training pathways adequately prepare operators for complex venous reconstruction, or do education gaps still exist?

Huge gaps exist. Vascular and interventional radiology training still very much focus on arterial disease, while venous disease remains an afterthought. My honest view is that young trainees need to keep an eye on the future. Just as we saw drug therapy make surgery obsolete in other fields, I am interested to see what the state of play for peripheral artery disease (PAD) is in 20 years! Aortic surgery has definitely plateaued, and abdominal aortic aneurysm incidence has started to reduce. Will the advent of glucagon-like peptide-1 inhibitors and their impact on diabetes, improved drugs for cholesterol, and continued reductions in smoking have the same on PAD?

Which areas of ongoing venous reconstruction research are you most excited about?

I am delighted to see C-TRACT published, but I am most excited about studies like the DEXTERITY trials, which are starting to expand treatment beyond just the stent and into vessel wall modification. I think a multimodal treatment strategy for venous disease is the future. ■

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