

# AN INTERVIEW WITH...

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

Mr. Black discusses when stent placement is ideal in patients with venous disease, the need for more accurate tools to measure inflow, and what's next after ATTRACT.



**With clinical trials underway, several devices available in Europe, and some devices presumably on the way in the United States, venous stenting is on the rise. When is stent placement ideal, and when should it be avoided?**

Stent placement is ideal in symptomatic patients with significant iliac or inferior vena cava occlusive disease. In reality, this is largely patients with postthrombotic syndrome or patients who have had lysis for acute deep vein thrombosis (DVT). However, there are clearly a group of patients with so-called nonthrombotic iliac vein lesions (NIVLs) who benefit from stent placement. The difficulty in these cases is a good objective measure of outflow obstruction to better identify patients who would benefit from stenting.

In my opinion, stents should be placed with caution below the confluence of the profunda and femoral veins and should certainly be avoided in patients with poor inflow from the lower limb unless this can be improved. The “bailout” option in arterial surgery when stents go wrong is typically a bypass operation, which most surgeons are comfortable with. In venous disease, this option is far less attractive, and therefore, the downside for bad decision making in terms of venous stenting is far worse for the patient. Appropriateness of treatment is our biggest challenge.

**What factors make you lean toward stenting into or beyond the confluence of the profunda and femoral veins as a last resort? In other words, what clinical findings make this approach a risk worth taking?**

I stent beyond the confluence with extreme caution. I am aware that some practitioners have seen good results stenting the femoral vein and deep into the profunda, but this has not been my experience.

Furthermore, if the stent becomes occluded in these patients (who typically start with worse disease), all the collateral vessels are then damaged.

If the profunda is well developed and clearly the only inflow vessel, then I may be tempted to stent into the profunda origin. However, in these cases, it usually indicates extensive disease, and I would consider an endophlebectomy to improve the inflow.

**With no ideal options currently available, do any particular avenues of study call out to you?**

Yes. We clearly need to look at how to improve inflow more effectively. This will require accurate tools to measure inflow and ways we can reliably improve the profunda and femoral vein flow. The gateway may be a solution to the popliteal vein. A heavily diseased popliteal segment is difficult to treat.

**Do you think there is cause for concern for over-stenting in the future? If so, what words of caution would you share?**

Absolutely, and this is a big concern. The primary danger area is NIVLs where the indication for treatment may be less clear. Some May-Thurner compression is normal, and if you look, you can find it. This is particularly true when techniques can be manipulated to increase the severity of compression. If we fail to drive ethical and responsible practice, patients will suffer and we will prevent those patients who need treatment from accessing care when the pendulum swings back, as it inevitably does.

**What is unique about your group's approach to training new venous practitioners, and what role does simulation technology play in training physicians in new procedures?**

My vascular colleagues at Guy's and St Thomas' have been extremely supportive in allowing me to focus

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virtually 100% of my time on venous patients, which has meant we have been able to grow the practice effectively. We have built an extremely dedicated team of hematologists, interventional radiologists, ultrasonic angiologists, nursing, and support staff, all of whom have developed considerable experience in managing these patients. Good results are only achieved by a team. It cannot be an individual practice.

We have also been able to introduce a dedicated venous fellowship; Chung Lim was our first fellow and has gone onto a consultant post at the Royal Free Hospital. This allows us to identify and hopefully grow a network of enthusiastic venous interventionalists who want to develop this field.

**What is the most important step for moving toward a personalized approach to treating venous thromboembolism, keeping in mind both clinical results and each patient's needs and quality of life?**

I think the first step is building a team of specialists who can bring multiple viewpoints to each patient case. This helps to tailor therapy and more importantly postprocedural care. Rigorous postprocedural care and follow-up delivers results.

We are working on techniques through the research work of Justinas Silickas, Prakash Saha, and Alberto Smith, which focuses on more effective means of clot aging with MRI, so that we can better select patients who would benefit from intervention.

**Where do we pick up where the ATTRACT trial left off, both in terms the next major trial need and in clinical DVT practices?**

Like all trials, ATTRACT can be picked to pieces if we so choose, but I think we should recognize that it was a monumental effort and represented the best we knew when it was envisaged. As with all treatments, effective evolution of treatment is a journey. What ATTRACT tells us is that neither medical treatment or lysis as delivered in ATTRACT is good enough if you consider that the rate of postthrombotic syndrome was 50% in both arms. This means we are failing patients regardless of treatment choice.

We need to improve the efficacy of treatment as well as the safety (which comes through better patient selection as a component). Modern treatment has advanced, and our practice and others, such as University Hospital Bern in Bern, Switzerland, have

demonstrated results of treatment that do not appear comparable to ATTRACT.

We need to demonstrate that lysis therapy works, build on ATTRACT, and continue to find ways to better serve this patient population. This will come from cohort studies of best practice care, improvements in technology, and ultimately, further trials. This is a well-trodden path—we have seen this in stroke and acute coronary patients where early clot removal therapies ultimately evolved through many trials to become standard of care.

**What's one change in protocol that has been made in your department that has had a notable impact on either patient outcomes, patient or physician satisfaction, or efficiency?**

The most important part of the protocol was recognizing that the stent procedure/lysis therapy was just one part of the puzzle. Rigorous attention to both peri- and postoperative best medical management is essential for good patient outcomes. Viewing the pathway as a whole with the input of the whole team has made a tremendous difference to our patients.

**If you could choose any place in the world to live and practice for 1 year, where would that be?**

Very good question! I believe I am exceptionally lucky to work in Guy's and St Thomas' Hospital. It is a world-class institution in one of the most vibrant cities in the world, and I have exceptional colleagues. So, I am happy in London.

However, I would say that if I needed to go somewhere to learn new skills, then I would choose to spend a year with Oscar Maleti and Marzia Lugli in Modena, Italy. They are exceptional surgeons, and I would need a year to get anywhere close to what they achieve with open valve surgery. ■

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*Disclosures: None.*