DVT: The Patient's Perspective

When the senior peripheral marketing manager for a mechanical thrombectomy device manufacturer learned he had a deep vein thrombosis, he learned firsthand the frustrations of being a DVT patient.

BY DAN JANSE

Over the course of a week, I began to notice tightness in my right calf. I didn't think much of it because I run and exercise regularly and occasionally experience similar sensations. I figured it was just another sign of getting older, or perhaps a pulled or strained muscle. By Thursday, the pain seemed to be more constant, and I began to think it may be more than a muscle strain; the pain persisted, and my calf muscle got tighter, with a centralized pain directly behind my knee.

Working in the medical device industry with a career focused on the issue of deep vein thrombosis (DVT) over the years, I recognized what seemed to be familiar symptoms. I doubted it could be a DVT though, having an active lifestyle and no family history of vascular disease; regardless, I contacted the local radiology group to schedule an ultrasound. I was told I would need a referral, which was problematic because my primary doctor was on sabbatical, and I would not be able to have an appointment with his partner for another 2 weeks.

Being my only option, and in order to put my worries to an end and rule out a DVT, I stopped by the emergency room (ER) at my local hospital. The ER physician listened to my concerns, and although he did not think I had a DVT (he thought it was more likely that I was suffering from a cyst behind my knee, something common among runners), he ordered an ultrasound.

CONCERNS CONFIRMED

While awaiting the results of the ultrasound, I convinced myself the ER physician was right and that I was overreacting to my symptoms. I contemplated the irony that I—a man whose career focuses on thrombectomy and DVT—would become victim to this very condition. The physician returned to my bed and told me the ultrasound revealed that I did indeed have a DVT.

Questions about the diagnosis flooded my mind. In which vessel? How much clot is there? Is it a full occlusion? How far up is the clot? Calf and/or thigh? The physician could not answer all of my questions, so I requested to speak with the radiologist. The reading radiologist explained that I had a clot above the knee, but my common femoral artery was clear. We discussed my options with the ER physician and concluded he would send me home on low-molecular-weight heparin, where I could follow up with my general physician. However, I explained that I preferred a more aggressive approach and requested to talk with an interventional radiologist.

After being brought up to speed by the reading radi-

ologist, the interventional radiologist and I discussed the options of intervention versus the use of anticoagulation, as I am very familiar with the studies and theory behind each approach. Having spoken with physicians and having seen results of thrombus removal in DVT for the past 3 years, I decided I wanted the thrombus removed as quickly as possible. Accordingly, the radiologist suggested they give me a shot of low-molecular-weight heparin for protection until I could report to the interventional radiology (IR) department the next morning for a venogram and intervention. I agreed, anticipating an easy, 1-day procedure—I did not expect what the next 4 days would bring.

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After checking in to the IR department on a Friday morning, I spoke with the radiologist who reviewed my ultrasound, asserting I would like his treatment to be aggressive. I hypothesized that the thrombus was acute, due to only slight symptoms and little pain, thinking I caught it early. I knew what to expect as they brought me to the IR suite; however, this was not just some patient I was watching as the doctor performed the procedure—we were looking at the contrast flow in my vessels. The radiologist shot the initial vessels and explained that there was some clot in the popliteal vein, as well as in the femoral vein. He proceeded to pull the Possis AngioJet Xpeedior (Minneapolis, MN) (the very device I market, for which I know all the benefits and risks of its use) and Power-Pulsed the segments, removing the clot in the popliteal vein, with some remaining in the superficial femoral vein. After the procedure, I was given catheter-directed lytic therapy.

FROM THE TABLE TO THE BED

The access point was my ankle, so I was required to lie in bed with my leg straight until the next day, when they would perform another venography to identify the success of the lytic. My apprehension grew as I awaited the results, but I remained optimistic, thinking that the vessel would be clean and I would be able to go home soon. The venogram revealed no change, and I was ordered another 24 hours of lytic therapy, by a different radiologist.

Because of my knowledge of DVT, I began asking the physician questions about my symptoms and why he made a reference to this being an older, more chronic thrombus. I believed that, because the onset of my symptoms was quick and subtle, this had to have been fresh thrombus, contrary to his diagnosis. I asked about other options, but the physician told me he was aware that I worked for Possis and would not be changing his practice in light of that fact. He promptly walked away, ordering me to another 24 hours of lytic therapy.

As I started my third day of lytic therapy, my hope of resolving this with a quick procedure began to vanish. I was confused about the physician's findings, and I was frustrated that we did not discuss my current state or options before he left, especially because I am familiar with the effects of postthrombotic syndrome on a person's lifestyle. But how do you argue your care when the physician walks away and you are supine on a table with a 6-F sheath in your ankle?

The nights were long and sleepless, with constant visits from my nurse. After another 24 hours of lytic therapy, my blood draw and IV sites began to bruise; bending over my bed rail to pick up my laptop produced a large upper arm hematoma.

I returned to the IR lab for testing on Sunday afternoon, eager for an update on my condition. The radiologist determined that the femoral vein had not improved, despite more than 2 days of lytic therapy.

WHAT I LEARNED AS A PATIENT

- The best options for treating DVT patients are not always clear.
- The option of aggressive endovascular treatment of DVT is oftentimes overlooked.
- Treatment options are confusing to both physicians and patients.
- Physician groups need to communicate and work together to better treat DVT.
- Facilities need a structured treatment plan for DVT patients.
- Both patients and physicians need to be better educated on the benefits of an endovascular approach to treating DVT.

After some discussion, the radiologist decided to venoplasty the vessels to try to improve flow. During the inflation, the physician injected contrast, at which point he determined that I had two femoral veins (which occurs in up to 20% of patients). The radiologist proceeded to direct a guidewire through the newly found branch, which he discovered was loaded with clot; consequently, a drip wire and catheter were placed in the new vessel for another day of lytic therapy.

Although I didn't fully understand what the discovery of this new vessel meant or how it affected my long-term prognosis, the physician assured me this was the best method of treatment when I again asked about the thrombectomy. I think physicians tend to overlook how informed the public can be about their conditions nowadays. The Internet enables many people to understand treatment options that are available. In this particular case, my experiences in the medical industry allowed me to understand not only my current situation but also the possible outcomes if it were not treated successfully. I had heard podium speakers quote statistics of a 30% to 60% rate of developing postthrombotic syndrome and could not help but contemplate how such an outcome could degrade my future quality of life.

As the anesthesia began to wear off, I continued to ponder how having a second femoral vein affected my situation. Because the radiologist left quickly after the procedure, we did not have a chance to discuss the prospects of the newly discovered vessel. I wanted to make sure I would get the safest (yet most aggressive) therapy possible, so I decided to have the physician call me to explain his findings.

MORE QUESTIONS THAN ANSWERS

Upon receiving his phone call, I had many questions. Was the vessel easy to wire? Did it look like fresh thrombus? Was this the main femoral vein? Why do I have two femoral veins? I was relieved to get some answers that helped me better understand the situation. During the discussion, he said it was possible that the second vessel was the main vessel, but we would have to wait until the next day to see how the lytic therapy affected the newly discovered vessel.

The next day, I was brought to the IR suite and met with another radiologist to view the results. At this point, I had received treatment from three radiologists, all with a slightly different approach, which, I believe, makes a valid argument for a standard to be developed to provide continuity of care for venous thrombus patients. My vein was injected with contrast, and although the physician found some residual thrombus, he was able to clean it up with the AngioJet DVX catheter using the Power-Pulse technique. After another 4 to 5 hours of lytics, I was discharged.

I later had the opportunity to speak with the radiologist who found my second femoral vein, and I asked him why he decided to inject contrast behind the inflated balloon during the venoplasty. He responded that he had done it on a hunch that something was not right, and I am glad that he did. I also inquired as to why the ultrasound did not reveal my second femoral vein, and he explained that sometimes ultrasounds fail to detect a vessel.

Without my knowledge of DVT and the treatment available, I believe I would have never been given the option for aggressive treatment from the facility that completed the ultrasound, as the options for DVT are confusing to physicians and patients alike. Based on my experience, I understand how important it is that both physicians and patients be educated on the benefits of an endovascular approach to treating DVT, because I think the option is overlooked in the majority of cases. Additionally, I believe my experience highlights the need for and significance of the ATTRACT trial, which will compare the standard of anticoagulation versus an aggressive therapy arm using mechanical devices.

CONCLUSION

After 3 months, I am fully recovered and back to exercising every day that I can. Because of my work with endovascular devices, as well as my firsthand experience, I have developed a new passion for spreading the word on the benefits of treating DVT early and aggressively. I have no doubts that had I followed the recommendations of the emergency room and reading radiologist, I would be facing long-term treatment with a life-limiting disease state. ■

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