

'Inside Look' at Blood Vessels Aids Peripheral Artery Disease Treatment



Virtua vascular specialists are now utilizing lumivascular atherectomy for the treatment of peripheral vascular disease.

Lumivascular atherectomy incorporates an imaging fiber attached to the end of a catheter that allows the operator to better differentiate between healthy and diseased tissue as they remove plaque from inside the diseased vessel.

“This technology allows me to remove as much plaque as possible while minimizing damage to artery walls and healthy tissue,” said Luai Tabaza, MD, FACC, FSCAI, RPVI, who began using the technology last fall. “I can see in real time where I am in the vessel and how much plaque I am taking out. This is the next level of targeted treatment.”

A balloon integrated into the catheter aids in maneuvering a high-speed blade that shaves off the plaque. The plaque is stored within the catheter and then removed from the body.

“We can rotate and engage the plaque at different angles. We are able to target specific areas of with plaque while avoiding dissecting the artery walls and reducing the chances of restenosis,” said Dr. Tabaza.

If needed, a separate catheter is used to implant a stent or deliver a medication to keep the artery open.

As with traditional atherectomy, lumivascular atherectomy utilizes fluoroscopy. However, as it is not needed as often during the procedure, radiation exposure to patients and the medical team is greatly reduced.

“Our ability to diagnose and effectively treat cardiovascular disease continues to evolve,” said Chun (Dan) Choi, MD, Virtua vice president of clinical operations for cardiovascular services. “Technologies such as lumivascular atherectomy will not only improve the longevity, but the quality of life of our patients.”