What Is the Top Item on Your Radial Access Wishlist?

Priorities for the future of radial access include creation of new devices and innovations to existing technology, with a focus on length, low-profile outer diameters, and imaging advancements.

With Dejah R. Judelson, MD; Sudhakar R. Satti, MD, FAHA; Mike Watts, MD, FSIR; Pascal M. Jabbour, MD, FAANS, FACS, FAHA; Manraj K.S. Heran, MD, FRCPC; and Yana Etkin, MD, FSVS, FACS

DEJAH R. JUDELSON, MD

One of the great benefits of radial access is the ability to treat a patient and have them stand up and walk around shortly after the procedure. However, current technologies limit our ability to treat peripheral disease distal to the mid superficial femoral artery. My wishlist is a system that would allow us to treat the entire peripheral system (iliac to tibial) from a transradial approach. This would require longer sheaths, catheters, wires, and balloons. But with this technology, the ability to treat chronic limb-threatening ischemia in a patient and have them walk around postprocedure would be incredible!

SUDHAKAR R. SATTI, MD, FAHA

I would like to see a dedicated very stiff and supportive SIM2 guide catheter for radial access that comes with a dedicated dilator designed to stay in the proximal common carotid artery or ipsilateral vertebral artery V2 segment in 85-cm length. This would (1) allow direct radial access with low-profile, outer diameter–to–inner diameter ratio; (2) come in various inner diameters (0.071-, 0.081-, and 0.088-inch size); (3) come at a lower cost versus a more complex guide catheter with upward of 10 segments. The Axcelguide STIFF-J-1 (Medikit Co. Ltd.) is an example of such a device and is currently available in Japan.

MIKE WATTS, MD, FSIR

Nowhere in my femoropopliteal treatment algorithm is there a place for bare-metal stents. I applaud the development of long-shaft drug-coated balloons, but stents are often necessary for complex lesions in this area. Until drug-eluting stents and interwoven nitinol stents are available on long-enough shafts to reach the distal popliteal segment, radial access for peripheral artery disease treatment cannot be a primary strategy.

PASCAL M. JABBOUR, MD, FAANS, FACS, FAHA

My wishlist would include a long sheath with high trackability to track through tortuous vessels and supportive enough to avoid herniation in the arch, with a low profile (smallest outer diameter with the biggest inner diameter) to fit in a small radial artery.

MANRAJ K.S. HERAN, MD, FRCPC

There are two items at the top of my radial arterial access wishlist! One is the age-old story of a sheath or guiding catheter with a larger lumen and with as low an outer profile as possible, thereby permitting a greater number of devices, catheters, and wires through it. This system would be supple enough to navigate challenging and tortuous anatomy, thereby expanding our ability to treat a wider range of neurovascular conditions. The second item would be radial-based sheath and catheter systems allowing for treatment of spinal vascular pathologies, with a range of lengths and shapes permitting access down to the sacrum, if needed.

YANA ETKIN, MD, FSVS, FACS

The top item on my wishlist for radial access is the development of a more advanced and compact ultrasound device specifically designed for radial artery visualization and access. An ideal device would be small, portable, and have extremely high-resolution imaging capabilities to accurately map out the radial artery and surrounding structures. It would be beneficial if this imaging technology could provide real-time feedback on vessel health, such as presence of vessel stenosis, degree of calcification, or other abnormalities that could impact the success of the procedure. Additionally, this device should have integration with electronic health records and other digital platforms, allowing for real-time documentation and data collection. This could facilitate research on radial access techniques, outcomes, and potential areas for improvement. ■

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