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INTERVIEW

Beyond Paclitaxel: A Review of Non-Paclitaxel-Based Antiproliferative Therapies for PAD Management

An Interview With Mark Lessne, MD

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At the 2024 SIR Meeting in Salt Lake City, Utah, interventional radiologist Mark Lessne, MD, from Vascular & Interventional Specialists, Charlotte Radiology in Charlotte, North Carolina, presented several sessions, including “Beyond Paclitaxel: A Review of Non-Paclitaxel-Based Antiproliferative Therapies for PAD Management.” *Vascular Disease Management* spoke with Dr. Lessne about his presentation and the future of peripheral arterial disease (PAD) management.

Dr. Lessne, tell us about the presentation you gave at SIR.

I did this presentation with some of our residents at Johns Hopkins, who are fantastic. The motivation behind the presentation was that we have had paclitaxel devices for over 10 years now. And in 2018, there was quite a bit of concern with the Kastanos paper (“Risk of Death Following Application of Paclitaxel-Coated Balloons and Stents in the Femoropopliteal Artery of the Leg: A Systematic Review and Meta-Analysis of Randomized Controlled Trials”), which worried that paclitaxel may have some deleterious effects. So there was a resurgence of interest in the peripheral space for alternative agents. And the truth is, once we got into that discussion, we realized that we were a little bit reinventing the wheel because cardiologists had had this discussion years ago in the coronary literature.

As that controversy ramped up and then sort of died down recently, I started realizing that there are still people who are very interested in limus agents. A lot of this has gotten into full motion, and I thought it was a very good educational opportunity to explore limus agents and alternative agents for our peripheral interventional community. The bottom line is that there is a gigantic interest in non-paclitaxel studies, or non-paclitaxel devices.

Certainly, I think the urgency has tamped down a little bit as we feel more comfortable that paclitaxel is not as dangerous as maybe we thought in 2018 with the original Kastanos paper. But that being said, I think there's a lot of interesting promise with non-paclitaxel agents. There are multiple trials ongoing currently, trials that have been completed, and there are trials in Europe. Obviously, balloons are available, and a bioabsorbable limus-coated stent that should be FDA approved soon. It's going to be a short matter of time before the interventional community actually has these products.

Why do limus agents work well for PAD?

What’s funny is we think about paclitaxel being the dominant force in PAD in the United States. The truth is, we have limus agents, right? We use coronary drug-eluting stents off-label all the time in the proximal tibial arteries, and they do quite well. The challenge has been limus agents on non-stent platforms. As you know, it is a more difficult agent, the bioavailability in the tissue is less. I heard Dr. Marianne Brodmann describe it once as you almost need a device that will refill the limus agents as opposed to just sort of one and done. There have been all sorts of very ingenious, novel, and biochemically innovative ways of transferring, almost like a glue, which I think is also Dr. Brodmann’s term, transferring these agents to the wall without leaving a stent behind. We have a bunch of devices that are in trial now—there’s the MagicTouch PTA solution (Concept Medical) and the [Esprit BTK] bio-resorbable stent by Abbott, with the LIFE-BTK trial, that should be hopefully approved relatively soon.

What's the one takeaway that you wanted the audience to get from your presentation?

The biggest takeaway is that there is going to be a paradigm shift and we have to adapt to the new devices that are coming out and, more importantly, we need to be in tune with the data. I will give a shout out to some of the industry that have elevated our game and actually insisted on randomized controlled trials comparing one device to another. I think as vascular interventionalists, we have been a little slack in doing that and we just accept the cool, colored, fancy device that looks awesome.

As more of these agents come out, we need to look at the data and see what works for our patients, what works for the subset of our patients—very patient-centric approaches. I think with these new agents we will have that opportunity, but we have to be judicious, we have to be very insightful and discriminating in analyzing the data. ■