## BRINGS THE FIRST & BEST BUNION PROCEDURE to Missouri

About 330,000 bunion surgeries take place in the United States each year. However, there are no standard, systematic approaches to correcting the bone prominence and enlargement of the great toe joint (first metatarsal phalangeal joint). This results in drifting of the big toe that causes irregularity, limited motion and even permanent deformation if not treated.

Dr. Jody McAleer, a podiatrist at JCMG, said surgeon experience, training and preference has driven procedure selection, and traditional surgical procedures do not always address the triplane nature of bunions, which can often lead to recurrence.

"The traditional procedure is essentially the fusion of the first metatarsal joint. We would accompany that by shaving the bump on the side of the foot," McAleer said, noting multiple incisions are used

and only corrects two planes. "This is something (JCMG podiatrist and colleague Dr. William Duke) and myself have been trained on and has been around for many, many years."

McAleer's colleague then introduced him to Treace Medical's Lapiplasty procedure. The Florida-based company developed the Lapiplasty that provides benefits of a standard reproducible surgical approach, achieves triplanar correction and supports immediate weight bearing for mild, moderate and severe bunion deformities, McAleer said.

"A doctor in Iowa, Paul Dayton, was working on this concept where you are correcting three planes and not two. ... That is what this system does, corrects in three planes with specialized instrumentation," McAleer said.

Those instruments are designed to manipulate and reduce the bunion prior to making the initial bone cuts. It allows for minimal bone removal, which

nearly eliminates the rest of significant bone shortening, McAleer said. It also uses a biplane plate fixation on the correction site, which makes immediate weight bearing possible, he said.

"Before with the traditional approach you weren't able to walk on the foot for approximately six weeks, using crutches or a knee scooter and then a walking boot for six weeks. You had a 12-week recovery process, which was very inconvenient for the patient," Dr. Duke said. "With the new system and its technique, it allows the patient to bear weight, using a walking boot for six weeks."

In working with Treace Medical, McAleer was able to bring it to JCMG, making the health system the first to perform this procedure in Missouri. He and Duke have now done more than 50 Lapiplasty procedures at JCMG since they started offering the operation in April 2017. Duke and McAleer said Lapiplasty is not just for women, many men have the same problem with bunions, which is genetic like the vast majority of foot problems.

"Men will say this hurts so I'm going to wear my sneakers or comfy dress shoes," McAleer said. "Men's shoes are naturally more comfortable and the shoe options for ladies tend to be very narrow, which leads them to suffer more."

"Most of the guys I've seen with bunions are really bad. They have a big jump on the side of their foot. We can do things ourselves to exacerbate that problem; wearing certain shoes or constantly doing activities that put more pressure on that area," Duke added. "People come in also depending on their pain threshold. What really bothers you may not affect someone else. ... Guys in laborbased jobs also don't tend to complain about pain as much, concentrating on their back, wrist or other areas that hurt them."

With Lapiplasty, the threestep process ensures the bunion is corrected without chance of recurrence, Duke and McAleer said. The positioner tool is engineered to quickly close the angle and de-rotate the metatarsal to establish and hold true alignment of the metatarsal and sesamoids in the foot, according to Treace Medical's website. Doctors like Duke and McAleer then utilize a Lapiplasty cut guide to make precise, parallel cuts with the metatarsal held in the correct position, ensuring the proper cut and eliminating the risk of metatarsal shortening, the website said. Two very small titanium-based plates are then used to provide stability, using standard-sized locking screws to accommodate anatomic variations without the need for intra-operative measuring.

"That is a question we receive from patients: am I going to feel them and will they need to come out? When the bone is healed, the hardware is superfluous; it doesn't need to be there anymore," McAleer said. "But, it is a surgical trauma to go in and remove them. If the patient has no complaints of pain or discomfort then you don't remove the hardware. ... We have had no complaints from patients."

In late September, Duke and McAleer held a seminar discussing the Lapiplasty surgical procedure for bunions, and one patient spoke about having a traditional bunion surgery on one foot and getting the Lapiplasty procedure done on her other foot. "She told the whole audience about her experience, how happy she was and how the results on both sides were good, but the overall beginning to end for moving again was much smoother and easier with Lapiplasty," McAleer said.

Even though patients can immediately bear weight, they do advise patients to wait before doing daily activities until the boot comes off and do more strenuous exercising and sports after three to five months.

Duke and McAleer have seen patients come from as far away as Hannibal and Kansas City for Lapiplasty, willing to drive to get the procedure done.

"We have people say they saw our seminar presentation on Facebook and we're doing way more to let people know this is the way to get your bunion corrected and fixed," Duke said.

"Ninety-nine percent of our patients who needed to correct their bunions had this procedure done now, and they have been so happy they had it done," McAleer said. "The results have been excellent."

For more information visit jcmgpodiatry.com and view the seminar video presentation at facebook.com/JCMGpodiatry.

