

THANKS TO CUTTING-EDGE TECHNOLOGY, A 70-YEAR-OLD WOMAN RETURNS TO A PAIN-FREE LIFESTYLE AFTER TOTAL HIP AND KNEE REPLACEMENT SURGERIES.

WHEN MARY LEE BASS SUFFERED AN INJURY TO HER LEFT

knee after a tap dancing accident 11 years ago, the now 70-year-old took time off to complete physical therapy and recuperate before putting on her dancing shoes again. But after eight years, the active grandmother of three began noticing the pain in her knee was slowly returning, as well as nagging pain in her right hip.

That's when Mary Lee, a retired Monmouth University educator, turned to Mark W. Gesell, M.D., FACS, an orthopaedic surgeon and joint replacement specialist with Monmouth Medical Center. After examining Mary Lee, Dr. Gesell shared surprising news—her knee needed replacement, but her hip needed attention first.

"Mary Lee had advanced arthritis in both her hip and knee," recalls Dr. Gesell. "Her knee symptoms improved with injections and physical therapy, but her hip symptoms got worse."

"Dr. Gesell discussed the surgical options for my hip, and we decided to go with Makoplasty robotic-assisted total hip replacement," says Mary Lee. "At the time only hip and partial knee replacements were being done robotically, and Dr. Gesell wanted me to wait until I could have my full knee replaced robotically. I knew my knee was on the backburner."

And just like she did before, Mary Lee bounced back. But once her hip replacement was behind her, Mary Lee's knee pain became more limiting. "I'm very active," she says. "But the pain



Mary Lee Bass turned to Mark W. Gesell, M.D., when she needed hip and knee replacement surgeries. Because arthritis affected all three compartments of her knee, Mary Lee required total knee replacement. Monmouth Medical Center was the first hospital in the region to offer the advanced option of Mako Total Knee replacement.

from my knee began causing mobility problems. We had to wait until the technology was ready."

Dr. Gesell told Mary Lee that 2017 was the year for the Makoplasty technology required for robotic total knee replacements when he treated her hip. So when January rolled around, Mary Lee began checking in with Dr. Gesell's office to see when she'd be able to have surgery.

"I was calling Dr. Gesell's office once a week to see when it would be time. Because the hip replacement went so well, I was ready to have the second surgery done," she says.

After a few short weeks, Mary Lee got the news she was hoping for-Dr. Gesell was able to perform roboticassisted total knee replacements and Mary Lee's surgery could be scheduled.

"Monmouth Medical Center was the first in the region to offer Makoplasty robotic-assisted partial knee surgery. Now we are also the first to be able to offer the advanced option of Mako Total Knee replacement to patients like Mary Lee," says David Chalnick, M.D., FACS, medical director of The Joint Replacement Center at Monmouth Medical Center. (See sidebar.)

"Mary Lee had significant arthritis in her whole knee joint," adds Dr. Gesell. "Because the arthritis affected all three compartments of her knee, she required a total knee replacement."

In preparation for her surgery, Mary Lee underwent a CT scan of her knee joint, which was used to generate a 3D virtual model of her joint and pre-operative plan to ensure exact placement, orientation and alignment of the implant. During the surgery, Dr. Gesell used the Make robotic arm to follow the personalized pre-op plan to remove the diseased portion of Mary Lee's bone and cartilage. Implants, chosen to accommodate Mary lee's active lifestyle, were then secured to allow the knee to move smoothly again, in a natural-like motion.

Following the surgery. Mary Lee spent just two days in the hospital and was back on her feet and driving herself to physical therapy in two weeks. After a month of rehabilitation, she has a smile on her face and feels better than she could have imagined. Today, thanks to aggressive physical therapy, Mary Lee shows no sign of slowing down. She is back to walking, going to the gym and keeping up with her grandchildren.

"When you have surgery, you can anticipate the discomfort and measured healing over time but you can't guarantee a high-level of care. Thanks to Dr. Gesell, the nurses and the staff at the hospital, it was perfect," she says. "I'm so glad I waited for the robotic-assisted surgery. I wanted my knee to be happy and healthy, and it is!"

Monmouth is first in region to offer

Mako Total Knee replacement

For the thousands who had been waiting for a solution to their knee pains, the wait is now over. Monmouth Medical Center is the first hospital in the region to offer Mako Total Knee replacement surgery. It had previously been the first in the area to give patients the option of Mako Partial Knee replacement procedures.

Mako Total Knee replacement is a minimally invasive approach. It utilizes a surgeon-controlled robotic arm system that enables precise alignment and placement of implants. This results in smaller incisions, less pain and a quicker recovery—all good news for patients.

Additionally, the Mako System software assists surgeons in preplanning and treating patients, allowing for a customized approach to accommodate active and varied lifestyles. This is also welcome news for patients, as knee replacements specially designed for size and function. Ultimately, the Mako Total Knee replacement provides more natural motion and the potential for greater implant longevity.

The Mako platform has been supported by significant primary clinical research, including more than 50 peer reviewed clinical publications, more than 300 scientific abstracts and numerous ongoing clinical studies. Over a two-year period, Mako unicompartmental knee arthroplasties (UKA) have a 92 percent patient satisfaction grade, and the robotic-arm assisted UKAs resulted in more accurate implant placement than manual UKAs in a randomized control trial.

For more information about the benefits of Mako Total Knee replacement, call the Joint Replacement and Spine Center at 732.923.7666.

