



## MONMOUTH MEDICAL CENTER GRANTS LIFE-CHANGING KNEE REPLACEMENT SURGERY TO MORRISTOWN RESIDENT THROUGH OPERATION WALK 2013

◀ “Operation Walk” patient Todd Patterson meets with his surgeon, David L. Chalnick, M.D., and Dana Delatush, Clinical Director of the Orthopaedic Unit, following his bilateral knee replacement surgery at Monmouth Medical Center.

**WHILE MORE THAN** 1 million hip and knee replacements are performed in the U.S. each year, countless men and women continue to live with severe arthritic pain and immobility because they cannot afford joint replacement surgery.

Such is the case of Todd Patterson, 48, a carpenter from Morristown who has faced progressive, debilitating knee pain for more than 20 years. In December, Todd had bilateral high-end knee replacement surgery at Monmouth Medical Center and inpatient rehabilitation at HealthSouth Rehabilitation Hospital of Tinton Falls at no cost as part of Operation Walk USA 2013.

Operation Walk USA, now in its third year, is a non-profit medical humanitarian effort providing free hip and knee replacement surgeries for uninsured patients in the U.S. who do not qualify for government assistance programs. Through Operation Walk USA 2013, approximately 230 patients received free joint replacements from 130 volunteer orthopaedic surgeons at 70 participating hospitals, December 2 through December 7, 2013. Leading Operation Walk at Monmouth Medical Center—one of three hospitals in New Jersey participating—was David L. Chalnick, M.D., an orthopaedic and joint replacement surgeon and medical director of Monmouth Medical Center’s Joint Replacement Center.

Todd’s injury began as the result of a motorcycle accident while he was in college nearly two decades ago. Four years later, he injured his knee again when he fell from a church roof during a construction job. About 10 years ago, arthritis set in and has grown progressively worse, causing Todd to experience severe pain every day.

“Over the years, the wear and tear on my knees worsened the condition. Eventually my right knee became really damaged because I spent such a long time favoring my left knee,” said Todd, who has been unable to work because of the condition. “I’m so grateful that Dr. Chalnick and Monmouth Medical Center are willing to help me get my life back. I’m thankful to get the chance to return to work.”

“Todd had bilateral severe bowlegged deformities. Normal knees are slightly knock-kneed. I performed knee replacement surgery on both knees—essentially reshaping his legs—to correct his severe deformity and allow Todd to walk more normally and hopefully pain free,” said Dr. Chalnick, who also participated in Operation Walk last year as a way to give back to patients.

“Monmouth Medical Center prides itself on providing quality medical care for all our patients. Through programs like Operation Walk and the kindness and compassion of our dedicated physicians such as Dr. Chalnick, we’re able to provide this high quality care to patients in need,” said Frank J. Vozos, MD, FACS, President and Chief Executive Officer at Monmouth Medical Center.



◀ Orthopaedic surgeon and joint replacement specialists David Chalnack, M.D., right, and Mark Gesell, M.D., performed Monmouth's first robotic-assisted joint replacement procedures.

## BREAKTHROUGH ROBOTIC ARM TECHNOLOGY AT MONMOUTH MEDICAL CENTER OFFERS NEW LEVEL OF ACCURACY AND REPRODUCIBILITY FOR PARTIAL KNEE AND TOTAL HIP REPLACEMENT

**MONMOUTH MEDICAL CENTER** is the first hospital in central and southern New Jersey to introduce robotic-assisted partial knee resurfacing and total hip replacement procedures.

The robotic-assisted surgeries are performed using the RIO Robotic Arm Interactive Orthopedic System marketed by MAKO Surgical Corp. RIO is a surgeon-controlled robotic arm system that enables accurate alignment and placement of implants.

"Accuracy is key in planning and performing both partial knee and total hip procedures," said David Chalnack, M.D., medical director of the Joint Replacement Center at Monmouth Medical Center. "For a good outcome you need to align and position the implants just right. RIO enables surgeons to personalize partial knee and total hip arthroplasties to achieve

optimal results at a level of accuracy and reproducibility previously unattainable with conventional instrumentation."

The RIO System features a patient-specific visualization system and proprietary tactile robotic arm technology that is integrated with intelligent surgical instruments. It assists surgeons in pre-planning and in treating each patient uniquely and with consistently reproducible procedure.

Monmouth Medical Center announced in October that it had reached another robotic surgery milestone by performing the region's first robotic partial knee replacement surgery to treat osteoarthritis of the knee. This latest example of pioneering robotic surgery at Monmouth Medical Center follows

the hospital's recent milestone of performing more than 2,000 robotic surgeries.

Partial knee resurfacing is a minimally invasive treatment option for adults living with early to mid-stage osteoarthritis that has not yet progressed to all three compartments of the knee. The first procedures were performed by Dr. Chalnack and Mark W. Gesell, M.D., an orthopaedic surgeon and joint replacement specialist with Monmouth.

A pre-surgical plan is created based on a CT scan of the patient's own knee, and the surgeon uses the robotic arm during surgery to resurface the diseased portion of the knee, sparing healthy bone and surrounding tissue for a more natural feeling knee. An implant is then secured in the joint to allow the knee to move smoothly again.

"Robotic partial knee surgery can facilitate optimal implant positioning to result in a more natural feeling knee following surgery and result in a more rapid recovery and shorter hospital stay than traditional knee replacement surgery," Dr. Gesell says. "We are proud to be the first in the region to offer this innovative treatment option to our patients."

In November, orthopaedic surgeon Arthur K Mark, M.D., performed the first robotic-assisted total hip replacement surgery, which utilizes the RIO system for visualization of the joint and biomechanical data to guide the bone preparation and implant positioning to match the pre-surgical plan. After first preparing the femur or thighbone, the surgeon uses the robotic arm to accurately ream and shape the acetabulum socket in the hip, and then implant the cup at the correct depth and orientation. The surgeon then implants the femoral implant.

TO LEARN MORE ABOUT ROBOTIC-ASSISTED JOINT REPLACEMENT SURGERY OR TO LEARN ABOUT UPCOMING PATIENT INFORMATION SEMINARS, CALL THE JOINT REPLACEMENT CENTER COORDINATOR AT **888.724.7123**.

