

Knee replacement: Less pain, faster recovery



Safa Kassab, MD



Hassan Hammoud, MD



Joffer Hakim, MD

Karen Isgrigg of West Bloomfield is a former high school cheerleader and gymnast who describes herself as a lover of dogs and travel. Now, at the age of 63 and recently retired, Karen spends most days with her husband, Scott, traveling between metro Detroit and vacation homes in Florida and northern Michigan. The couple also looks forward to regular visits with their adult sons living in California and North Carolina.

Karen credits two successful knee replacement surgeries in four years for her renewed sense of mobility and says they have allowed her to return to the activities she loves.

Karen estimates she experienced 30 percent less pain during her second knee replacement, performed earlier this year, when compared to her first knee re-

placement four years ago. Her orthopedic surgeon, Safa Kassab, MD, says the reduction in discomfort can be attributed to an innovative new pain management treatment, called iovera^o, which he applied to Karen's knee prior to this year's surgery.

Cool new treatment

iovera^o is an FDA-approved handheld device that applies a very targeted cold treatment to both deep and shallow peripheral nerves surrounding the knee, which immediately prevents pain signals from being sent to the brain. The goal is to decrease pain pre- and post-surgery so that patients are comfortable enough to begin rehabilitation.

"The effect of the cold on the nerves is temporary and does not

cause permanent damage because it leaves the structural components of the knee intact," explains Dr. Kassab. "The nerves are restored to function after six weeks, following completion of the patient's recovery and rehabilitation."

Dr. Kassab, who was the first to offer this treatment in Michigan, goes on to say: "I am now able to target a patient's nerves in a way that was not previously possible for surgeons, and the results have been amazing."

The treatment, which takes 15 minutes to complete, provides a non-systemic, non-narcotic alternative to more traditional approaches to pain management, such as steroid injections and the use of strong opioids.

According to Dr. Kassab, the new technology complements advancements that have been made by St. Joe's anesthesiologists in the Perioperative Pain Management Program.

"The priorities of our Pain Management Program are patient safety, enhanced recovery, reduction of narcotics and patient satisfaction," says Hassan Hammoud,

MD, director of Regional and Orthopedic Anesthesiology at St. Joe's. "We use various methods and administer multiple medications throughout the perioperative period with little reliance on opioid-based medications. Patients wake up from anesthesia with little to no pain or feelings of being tired."

Dr. Hammoud says the multimodal approach leverages the combined effect of medications and allows for greater pain relief while lowering the dose of any one medication. "Our ability to reduce the need for strong opioids has greatly enhanced recovery and rehabilitation for our orthopedic patients."

Joffer Hakim, MD, a St. Joe's anesthesiologist, describes a close coordination with surgeons that offer the iovera^o treatment. He says that when it is "combined with a peripheral nerve block (a local anesthetic near the knee), anesthesiologists have had great success controlling and/or eliminating pain altogether for patients."

Please call St. Joe's Physician Referral Line at **800-372-6094** to find out which orthopedic specialists offer the iovera^o treatment.

Strength training can reduce exercise injuries among active women



Thomas Perkins, DO



Robert Kohen, MD

Women of all ages are more active than ever, hitting the gym in droves and participating in sports at historically high levels.

This is good news overall, but with increased levels of activity, the numbers of female athletes reporting joint pain and injury is also increasing.

According to the American Academy of Orthopaedic Surgeons, active female

athletes are at greater risk than their male counterparts of developing bone and joint injuries. Anterior cruciate ligament (ACL) injuries are up to eight times more common in females than in males, and women are twice as likely to sprain an ankle.

Thomas Perkins, DO, an orthopedic surgeon and sports medicine specialist at St. Joseph Mercy Oakland, explains that there are various reasons for this. These reasons include:

Hormones. Although not proven, hormone changes may be linked to loosening of the ligaments, which can lead to instability.

Alignment. Women have anatomical differences, such as a wider pelvis and a tendency toward knock-knee (when knees bend inward).

Strength. Hamstrings help stabilize the knee, and women's hamstrings can be weaker than men's. Injury may result if hamstrings are weak or don't activate fast enough.

Size. Women's ACLs can be smaller than men's, so they may be more susceptible to fraying and injury.

Mechanics. Male athletes use certain hip and leg muscles more than women do. These differences can lead to kneecap pain for women and tears in the ligaments that support the knee.

Reducing injury with strength training

Dr. Perkins works closely with his female

patients—athletes and non-athletes alike—to encourage them to follow a healthy diet and exercise regimen, which includes strength training.

"Both men and women need to look at their body mass index and make sure they fall within a healthy weight for their height," says Dr. Perkins. "Coupled with that, women, specifically female athletes, need to buy into strength training. It will improve their performance on the field and protect them from injury."

Robert Kohen, MD, a board-certified orthopedic surgeon and sports medicine specialist at St. Joe's, recommends young athletes avoid joint problems by taking part in a sport-specific, targeted conditioning program that focuses on stretching, balance and weight-resistance exercises to strengthen their muscles.

Research shows that women jump and land differently than men, which may lead to injury, according to Dr. Kohen. "An experienced sports medicine physician can help athletes with athletic technique," he says. He recommends that all athletes meet with their doctor to develop intervention strategies for their performance training.

Dr. Perkins and Dr. Kohen agree that joint surgery among young female athletes is on the rise. They encourage both men and women to see a specialist promptly before aggravating an injury further.