



Hip resurfacing: a durable solution

NEW TECHNIQUES PRESERVE HIP FUNCTION
IN YOUNG, HIGHLY ACTIVE PATIENTS

An energetic 35-year-old woman who manages a house full of kids and runs 10k races is not a candidate for hip replacement surgery, right? But what if she is? How can her physician help her avoid the bone loss and physical limitations that go along with traditional total hip replacement?

Metal-on-metal hip resurfacing is a durable solution for the young, highly active patient who seeks to avoid the bone loss and limitations inherent in standard total hip replacement. Features of hip resurfacing include durable implants, normal load distribution, restoration of normal anatomy, reduction in the rate of dislocation, and bone preservation.

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Hip resurfacing is changing the way we treat severe hip arthritis in young, active patients. After surgery, patients are now routinely able to return to full sports activity and heavy work. Durability is such that 95 percent of implants are still functioning in highly active people after eight years. Unlike patients with standard hip replacements, which have a 5 percent risk of dislocation within 10 years, resurfacing patients have few restrictions and rare (less than 0.05 percent) occurrences of dislocation. Furthermore, hip resurfacing is a bone-conserving alternative to a conventional total hip replacement. Resurfacing does not involve the removal of the femoral head; rather, it preserves the head and neck of the femur. This may allow the patient to take advantage of more options in the future.

Thomas Gross, MD, is a specialist in joint replacement surgery of the hip and knee. He has been in private practice in Columbia, South Carolina, with Midlands Orthopaedics, a premier group of orthopaedic subspecialists, since 1994. Dr. Gross is a national leader in the development of metal-on-metal hip resurfacing and has developed a national referral practice for those seeking this procedure. He performed his first hip resurfacing in July 1999, and led a multicenter U.S. Food and Drug Administration (FDA) study to introduce the procedure to the United States. In the interim, he has refined the procedure, which was initially developed in England. He is now able to perform this operation routinely, using a minimally invasive approach through a 4-inch incision. Dr. Gross has performed more than 1,350 hip resurfacing procedures, working with patients from all parts of the United States and several other countries.

Dr. Gross also has developed a technique for minimally invasive total hip replacement through a single, 3-inch posterior approach (as compared to 4 inches for most hip resurfacings). He has safely performed this technique on more than 1,000 patients, who were not candidates for hip resurfacing.

For the past five years, Dr. Gross has worked with orthopedic device manufacturer BIOMET to design and develop a metal-on-metal hip surface replacement system and a large-bearing total hip replacement system. The BIOMET Recap Femoral and Magnum Acetabular System and the Magnum Large Bearing Femoral Head for Stemmed Total Hip Replacement, were cleared by the FDA and released for sale in the United States in December 2004.

The new BIOMET implants are designed to Dr. Gross' specifications, resulting in numerous improvements compared to previous

implants. Primarily, the instrumentation has been improved to allow surgeons to more accurately and reproducibly prepare the bone for the implant. The resurfacing implants are thinner than any on the market and are supplied in 2-millimeter increments to allow accurate matching of the implants to the patient's actual size. While most femoral hip resurfacing components are cemented to the bone, Dr. Gross has recently designed the first fully porous-coated uncemented femoral component. Implantation of this component began in the United States in April 2007, and physicians in Midlands Orthopaedics' clinic have used it in approximately 300 patients. 📺

Please visit www.Grossortho.com for more detailed information and surgical videos

Contributors for this article



Thomas P. Gross, MD, joined Midlands Orthopaedics in 1994. His undergraduate degree is from the University of Southern California in Los Angeles and his medical degree is from the Johns Hopkins University School of Medicine in Baltimore, where he also completed his internship and a residency in surgery and orthopaedics. Dr. Gross also completed a fellowship in joint reconstructive surgery under William Bargar, MD, in Sacramento, California. He is a member of the American Academy of Orthopaedic Surgeons, Columbia Medical Society, South Carolina Medical Association, South Carolina Orthopaedic Association, and Southern Medical Association.



Lee Ann Webb, NP, has been a nurse practitioner in private practice with Dr. Thomas Gross at Midlands Orthopaedics since 1999. She first obtained her certification as a registered nurse first assistant then her Master of Science degree in nursing as an adult nurse practitioner.