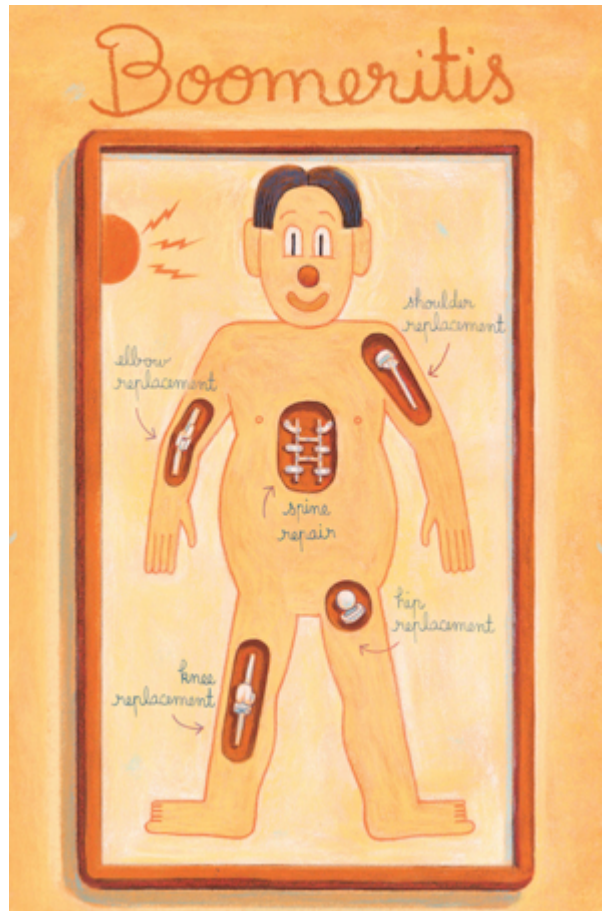


## Operation Boomeritis



**Dramatic improvements in both technology & technique have made joint replacement surgery a more attractive & effective option for 50-70 somethings.**

### **Play On Boomers.**

Boomeritis is real. So real, in fact, that Webster's New Millennium Dictionary of English defines boomeritis as "any sports-related injury suffered by someone of the Baby Boomer generation." With an evermore-active lifestyle, Boomers continue to push their bodies, pursuing various athletic endeavors well into their 50s, now 60s, and soon to be 70s. But their bodies can't keep up.

The increasingly active lifestyle of aging adults is perpetuating a need for orthopedic care among Baby Boomers— most notably joint replacement surgery. "The previous generation might come home from work, sit down and have a martini," says Dr. Steve Traina, who practices at **Rose Medical Center**. "In today's generation, people are much more active."

Dr. Traina, who specializes in total knee replacements, sees a growing number of patients between 48 and 55 years old who have the knees of a 70-year-old. Many are former athletes who once suffered injuries that accelerate the natural degenerative process. Now, at middle age, they don't want to slow

down. “People have higher expectations,” says Dr. Traina, “A 55-year-old still wants to hike in Peru or ski in Vail.” And it’s Traina’s job to get them there.

So while a more active lifestyle has caused an escalation of joint replacement surgery among the Baby Boomer generation, how has the medical industry responded to this need? What changes have made the procedure more viable for younger patients?



#### Hip Replacement With Polyethylene **Improved Materials & Modularity**

“Technology has improved to the point where normal, everyday function without restriction” can be restored, says Dr. E. Andrew Jonassen of **The Medical Center of Aurora**.

“And the longevity of the replacements has improved.” In short, both the replacement devices and the surgical procedures used to implant them have evolved to a point that makes total joint replacement a very sound option for younger patients looking to maintain an active lifestyle.

First and foremost, the replacement devices themselves continue to improve. According to Dr. Traina, today’s devices feature better engineering, allow better motion, and are made from better materials. “We have better plastic than even three years ago,” he says. These materials—metal, plastic and ceramics— are more durable than ever before and designed for a wide variety of body types and specific needs.

Which material is best for any given procedure depends on many factors, but across the board the options are impressive. “Each surface has advantages and disadvantages,” explains Dr. Jonassen. “Metal on metal is becoming more popular for its low wear rate and better predictability.” But this is not recommended for women of childbearing age, he says, because the friction can produce metal ions in the body.

What’s more, the devices are now modular, allowing doctors to replace only part of an arthritic joint,

or, should an old replacement wear out, replace only part of the artificial joint. For example, the Birmingham Hip Resurfacing System allows surgeons to resurface an arthritic socket and maintain as much of the original bone as possible. If the joint continues to cause problems, it can be fixed with less invasive methods.

All of these factors, as well as new gender- and size-specific designs, have increased the longevity and effectiveness of joint replacement devices. With artificial knees, for example, a 110-degree range of motion was considered acceptable ten years ago, according to Dr. Traina. Today, however, patients should expect to recover 130-150 degrees of motion, much closer to that of a normal knee.

As to their durability? Well, the technology is so new that no statistics are available to accurately reveal the life span of a modern joint replacement. While older replacement knees show 98 percent survivorship at 10 years, “We expect survivorship rates [of new knees] to be much better,” Dr. Traina says. “The new plastic can last 20 to 25 years.”

John Suter, 58, of Centennial, knows all about it. An athlete all of his life, Suter began to experience pain and difficulty walking in his late 40s. He was diagnosed with a medial meniscus problem and had his knee scoped to have the torn medial meniscus removed in 1996. While this was an acceptable short-term solution, it did not solve the larger problem.

Eight years later, Suter’s knee had deteriorated to the point that he was rubbing bone on bone with every step and the pain was unbearable. That’s when, in January 2004, he went to Dr. Traina for a total knee replacement. “Traina said ‘You’re not going to like me,’” Suter remembers about the pre-op consultation. The procedure seemed daunting, but it was the absolute best—and last—option. After 32 stitches, three days in the hospital, and 4 months of physical therapy, Suter was as good as new. “The toughest part was sleeping,” Suter says of the recovery period. “You just can’t get comfortable.” He believes that a firm commitment to the rehabilitation process helped his recovery immensely and recommends that anyone who undergoes joint replacement surgery strictly follow the physical therapy regimen.

“I don’t even think about it anymore,” he says. “My wife says I ski like I’m 30. I play golf. I ride the stationary bike every day. I walk on the beach. There is never a twinge or pain or thought that it’s weak.”

### **Improved Procedures**

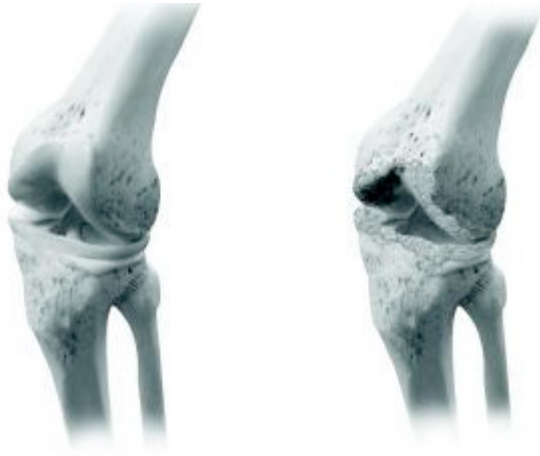
Suter’s surgery was just eight years ago, but the days of 32 staples and 12-inch scars on the knee are ancient history. Along with superior replacement devices, minimally invasive surgical techniques have reduced the impact and recovery time once associated with joint replacement surgery. Traditional methods would expose the joint and bone and require detaching muscle tissue. With a minimally invasive procedure, however, surgeons operate more precisely, making a smaller incision and working between muscles to minimize trauma and accelerate recovery. The average hospital stay for a total knee replacement has been reduced to three days and four days for a new hip.

Recovery times can vary wildly, according to Dr. Jonassen, depending on factors such as the age and physical health of a patient or the materials used in the new joint. Significant gains in physical therapy techniques are also getting new joint recipients on their feet much faster, with rehabilitation beginning the same day as the procedure in some cases.

In total knee replacements, a minimally invasive procedure, “means less trauma to the quadriceps muscle, which decreases pain and makes rehab much easier,” explains Dr. Traina. “It is ideal for some patients,” he says, but certainly not all. And it makes sense. The possibility of error is much greater when the surgeon can’t view what he’s doing. In any joint replacement procedure, perfect alignment

of the artificial elements and the natural bone is critical for success.

“The rap against minimally invasive surgery is that you can’t see,” says Dr. Rob Greenhow of **The Medical Center of Aurora** and Centennial Medical Plaza. “There is a higher incidence of malpositioning.” But that is changing quickly with the introduction of computer navigation and robotic assistance.



Healthy Knee (left) Arthritic Knee (right)

“It’s just like balancing the tires on your car,” Dr. Greenhow explains in layman terms. “If they are perfectly aligned, they are going to last longer. It’s the same with a knee. If it’s off a couple of degrees, it wears out faster.”

Having used minimally invasive procedures for years, Dr. Greenhow and his partner, Dr. Craig Loucks, now find themselves at the forefront of joint replacement technology. For the last year, the pair have been using the latest computer and robotic systems to assist in knee replacement surgery.

They introduced the same technology to hip replacements in the spring of 2007. In the case of knee surgery, a small robot is clamped to the femur bone to ensure stability. This robot then communicates with the computer to provide the perfect cut in the perfect position using GPS technology. Doctors employ all of the usual checks and balances, but the computer adjusts and shifts the components so that they are perfectly aligned.

“There is always variability within a cut on the bone and subsequent pin placement,” Dr. Greenhow says. But now,

“We can have confidence that the components are in perfect position.”

“It is not substituting for the human eye,” he continues, “but complementing the human eye.” By coupling minimally invasive techniques with advanced computer navigation and robotic assistance, patients get the best of both worlds. “Eventually this will become the standard of care,” Dr. Greenhow believes. “Technology has really revolutionized knee [and now hip] replacements.”

### **The Right Choice**

“Education is numero uno,” Dr. Traina says about patients trying to decide whether joint replacement surgery is right for them. As do most orthopedic surgeons, he considers total replacement the last

resort in healing an arthritic joint. First, he explains, he will educate a patient about the situation, telling them to quit playing basketball or to take a cart when they play golf. But, even with a change in lifestyle, it is impossible to stop or reverse arthritis, he explains.

Second, Dr. Traina will prescribe medication for the pain, and sometimes suggest supplements, though they are still controversial. Third, he will administer injections such as Cortizone. And finally, he will consider minor surgical options like a knee scope. “And when all of the above fail, you come to joint replacement surgery,” he says. And when you do come to joint replacement surgery, there is one very important characteristic to look for in choosing a surgeon: Experience. “You want a doctor who does joint replacements on a regular basis and has knowledge of newer techniques and a variety of approaches,”

Dr. Jonassen advises. The average orthopedic surgeon would perform four joint replacement surgeries each month, though some doctors do significantly more. Dr. Jonassen averages 50-60 joint replacements per year (primarily hip and knee), while Dr. Traina replaces 60-80 knees each year. These numbers indicate a strong focus on joint replacement procedures and a doctor with substantial experience. Both Traina and Jonassen also recommend that patients seek a doctor who received a post residency fellowship in joint replacements, saying that the extra education proves very beneficial in the long run. And finally, seek a doctor who will look for the least invasive solution to your individual problem.

“There are lots of very good surgeons in town,” says Dr. Jonassen. “My approach is to pick the method and implant that are most beneficial to the patient.” Any way you slice it, joint replacement surgery is not just for the elderly anymore. Vast improvements in surgical procedures, computer technology, and effectiveness of replacement devices, provide Baby Boomers with a safe and longterm solution to their aching joints.