Not So Fast With that Knee Surgery!

Your knee is killing you and the pain won't quit, so you see an orthopedist. He says that you've torn your meniscus, one of two C-shaped pieces of cartilage in the knee that serve as shock absorbers and help lubricate the joint. Then he recommends arthroscopic surgery to repair the tear, assuring you that it's a very common and minimally invasive procedure.

Do you say OK to the operation? Hold your horses!

Here's why: Even though this surgery is the most frequently performed orthopedic procedure in the US, there's growing evidence that, in many cases—or even in most cases—it simply doesn't help. In fact, according to a new study, the procedure works no better than fake surgery!

Here's what your knees need you to know...

Torn Meniscus? Common Surgery for Knee Pain Works No Better Than Fake Surgery

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REAL DEAL VERSUS A SHAM

The common treatment for a torn meniscus is an arthroscopic partial meniscectomy, in which a video camera and instruments are inserted through a few tiny incisions in the knee so the damaged portion of the meniscus can be trimmed and smoothed out. It's is the bread-and-butter procedure for many orthopedic surgeons, with 700,000 such procedures done each year in the US alone, at a cost of \$4 billion.

The new study, which was done in Finland and published in The New England Journal of Medicine, included 146 men and women. All had knee pain consistent with a degenerative tear—the most common type, caused by the "wear and tear" of aging rather than a sudden injury—of the meniscus. All were prepped for surgery and given anesthesia (usually spinal but sometimes general). Once the tear was confirmed by arthroscopic examination, a nurse opened an envelope to reveal each patient's random assignment to one of two study groups. The first group got the real operation...the second group got a sham procedure in which the surgeon simply pretended

to operate.

With the real meniscectomy, the damaged and loose parts of the meniscus were removed with tiny instruments, including a shaver to smooth the torn edges. For the sham operation, the surgeon asked for the same surgical instruments, manipulated the knee as if he were operating, pushed the shaver (without the blade) on the outside of the knee and used suction. Either way, participants were kept in the operating room for the same amount of time. Afterward, all were given the same postoperative walking aids and instructions for a graduated exercise program to promote recovery. Neither the patients nor the doctors with whom they followed up after surgery knew which procedure—real or sham—each patient had undergone.

Startling results: When patients were evaluated a year later, both groups reported equal levels of improvement in their knees. There were no significant differences in pain scores for the two groups, and both groups were equally satisfied with the outcome of their procedures—in fact, 93% of the surgery group and 96% of the sham group said that, given the chance, they would have the same procedure again.

In other words, the fake surgery was just as effective as the real deal!

IS THE TEAR CAUSING THE PAIN...OR NOT?

So what the heck is going on? When a patient has knee pain, his doctor typically orders an MRI... and if that the MRI shows that the meniscus is torn, the pain is generally assumed to be attributable to the tear. However, that assumption could be wrong.

Evidence: A study of nearly 1,000 randomly selected men and women ages 50 to 90 showed that one-third of them had meniscus tears. Tears were more common among the older people than the younger ones, which makes sense because these generally are considered wear-and-tear injuries that increase with age. What was startling was that the majority of tears (61%) were found in people who had no symptoms—no knee pain, no stiffness, no swelling. Furthermore, participants who had arthritis in the knee (as shown on x-rays) were more likely to have tears, even if they didn't have knee pain...and the worse the arthritis was in a given person, the higher the likelihood that that person had a meniscus tear.

What does this mean? In many cases, a torn meniscus could be an early sign of arthritis rather than the source of knee pain. It would be the arthritis—not the tear in the meniscus—causing the pain!

Arthritis of the knee is extraordinarily common, with more than 9 million men and women in the US having x-ray evidence of the disease and symptoms. Up until a few years ago, many people with arthritis of the knee had an operation to "clean out" the joint—until several studies showed that the operation is just not helpful. In fact, some studies suggested that arthritis progresses more rapidly in people who have had an arthroscopic meniscectomy!

I spoke with Kenneth Fine, MD, an orthopedic surgeon in private practice in Rockville, Maryland and an assistant clinical professor of orthopedics and director of sports medicine at George Washington University School of Medicine and Health Sciences in Washington, DC. "In many cases, it's likely that the pain is from the arthritis and not the meniscus tear," he told me. "A basic principle is that surgery is good for fixing mechanical problems but not for curing pain. People with knee pain can become frustrated, and they want to 'do something'—but often surgery is just not the answer."

WHAT HELPS WHEN SURGERY WON'T

When Dr. Fine sees patients with knee pain and meniscus tears, especially the degenerative type, he first treats them conservatively. "My initial interventions don't do anything directly to the meniscus, but they can help maintain the basic overall functioning of the knee," he said. Typically he uses some or all of the following approaches...

- Temporary "activity modification"—for instance, no more playing tennis until your knee feels better.
 - Ice packs applied for 20 minutes at a time, several times a day.
- Strengthening exercises for the quadriceps and hamstring muscles that help support the knee, such as those recommended by the <u>American Academy of Orthopaedic</u> <u>Surgeons</u>.
- Physical therapy to further strengthen muscles and extend the range of motion.
- Oral anti-inflammatory medications, such as aspirin or ibuprofen, as need.
- A cortisone injection in the knee to reduce inflammation.
- Weight loss, if appropriate.

WHEN IS AN OPERATION JUSTIFIED?

This is not to say that meniscus surgery is never justified. An operation may well be the best bet for...

Patients with degenerative tears that have resulted in a small piece of cartilage getting curled up under itself or a flap of cartilage literally getting stuck in the joint. These problems generally can be spotted on an MRI. [[Dr Fine, is that right? Or do you have to go in with the arthroscope to see these?]]

Patients who have acute tears (rather than degenerative tears) of the meniscus—the type typically associated with sports injuries or other trauma. With an acute tear, the rough torn edge can actually damage the joint surface if it's not repaired. This is particularly important in younger people, who generally have firmer cartilage than older people do, Dr. Fine said. In contrast, degenerative tears tend to be smoother and the cartilage softer, so they usually do no additional harm to the knee.

Bottom line: If you've been told that you need surgery for a torn meniscus, ask your doctor about the findings in this article...and if he doesn't make a clear case that your meniscus damage warrants surgery, get a second opinion before deciding whether to have the operation. You can get a referral from <u>The American Academy of Orthopaedic Surgeons</u>. After all, there's no point in putting yourself through the expense, inconvenience and risks that go along with any surgery if your knee is likely to improve just as much with some smart non-invasive therapies...plus time and patience.

Sources: Kenneth Fine, MD, orthopedic surgeon, The Orthopaedic Center, Rockville, Maryland, and assistant clinical professor of orthopedics and director of sports medicine, George

Washington University School of Medicine and Health Sciences, Washington, DC. www.TheOrthoCenterMD.com