

by Mark Yates, MD
Piedmont Orthopedics



Mark Yates, MD, is a board-certified orthopedic surgeon at Piedmont Orthopedics and the chief of surgery at Cone Health. Dr. Yates, who has practiced in Greensboro since 1988, specializes in sports medicine and general orthopedic surgery. He performs a wide variety of orthopedic procedures, including arthroscopic knee and shoulder surgery, and computer-aided knee replacement surgery.

Contact Dr. Yates at Piedmont Orthopedics at 336-275-0927 or on the web at www.piedmont-ortho.com.

Do you have a question related to this column or a general orthopedic question you would like to have answered in a future issue? Send an e-mail to AskPiedmont-Ortho@sosbonedocs.com.

Q. After I run or play tennis, I have pain in the front of my knee and my knee swells. This is something I haven't had in the past. What could it be?

A. There are a number of possible causes, including patellar tendon problems, knee alignment issues, joint tightness and flexibility problems, Achilles tendon injuries or even excessive wear on your shoes.

Most times, pain like you describe is related to the patellofemoral joint, which is the portion of the knee under the kneecap. When you do a lot of running, squatting and jumping, you increase the wear on this joint and that can lead to pain and swelling. In addition, patients with excessive wear sometimes develop kneecap tracking problems, where the kneecap slides sideways, causing pain.

What can be done? Workout modifications (such as reducing hard-court tennis in favor of soft-court play) often lessen the pain. Icing the area after workouts also can help. We sometimes recommend physical therapy, which will provide you with exercises to help strengthen specific muscles in the area around your knee. Rarely, we will do an arthroscopic procedure to fix a tracking problem or smooth out areas of wear in your knee.

In addition to pain, do you also notice that your knee seems to lock or get stuck in one position? If so, that can suggest a different cause for your pain – a meniscal tear, which can get worse if not addressed early. Typically, a torn piece of meniscal cartilage is catching in the joint – much like a piece of rug might catch in a door as it closes. This problem can be corrected in an outpatient arthroscopic procedure. Recovery is usually fast. Most patients are back playing tennis or running in a few weeks.

Another common cause of knee pain and swelling after exercise is tendonitis. Physical therapy and medications are usually helpful in resolving this, and sometimes bracing can help.

The good news is that surgery is rarely required for a problem like you describe. Simple changes in your workout routine – and the addition of strengthening exercises to support your knee structure – often will help with your symptoms, enabling you to stay in the game.

Q. I've been told I might need knee replacement surgery if my problem doesn't get better with physical therapy. What's new in knee replacement surgery?

A. Knee replacement surgery has gone through a major evolution in the last decade. The biggest change is the use of the laser and computer navigation to guide your surgeon in operating. These devices help us to ensure that your replacement fits precisely – that it's in the right size, the correct position and the proper alignment for your anatomy.

In addition to advances in the surgery itself, we also have more anesthesia options. In addition to general anesthesia, the anesthesiologist can use neuraxial anesthesia (or a nerve block) to reduce pain. That, combined with a mix of shorter- and longer-acting pain medications and non-narcotic medications that don't make you sleepy, helps many patients avoid significant pain in the post-op period.

Another option for patients today is a unicompartmental replacement – which replaces only one section of the knee – if your problem is in just one area. The recovery time is faster than with a total knee replacement.

Knee replacement should be considered only as a last resort – after all other avenues of treatment are exhausted. However, it can often help patients who have significant pain from arthritis get back to the active lifestyles they once enjoyed.