

ARTHROSCOPIC KNEE SURGERY TECHNOLOGY

R. STEPHEN LUCIE, M.D.

Former Head Team Physician, Jacksonville Jaguars

As a Jaguar fan, when you heard about Tony Boselli's knee injury and his subsequent arthroscopic knee surgery, your initial reaction was concern. Your next reaction was probably generated questions. How did it happen? How long will he be out? Who is performing the procedure? What exactly is arthroscopic knee surgery? Can this injury happen to me?

In the past, a severe knee injury may have meant the end of a professional's sports career and, for an amateur athlete, a major disability. Today, however, because of advances in arthroscopic surgery, millions of professional and amateur athletes continue to play.

During arthroscopic knee surgery, the surgeon makes a small incision in the patient's skin around the knee. A pencil-shaped arthroscope, a miniature lens and lighting system is inserted. To minimize scarring and assist in the insertion, the joint is distended with saline or salt solution similar to the fluids in the body. The surgeon then performs the appropriate procedure looking through this water medium. There are many types of arthroscopic surgical procedures. The amount and type of surgery required and the corresponding recovery time vary depending on the particular joint problem and the patient's physical health.

Since its introduction, hundreds of thousands of patients have chosen arthroscopic knee surgery over other types of surgery because the scar is smaller, the hospital stay is shorter and recovery is faster. Previously, correcting a common knee problem often meant major knee surgery and longer recovery time.

One of the most common arthroscopic operations is the removal of torn knee cartilage. Using specialized instruments, the surgeon removes the torn portion of the cartilage and reconstructs the remaining cartilage. The patient is allowed to begin weight bearing within 2-3 days and is frequently back to their respective sport or back to work in 3-4 weeks. Prior to this technique, normal recovery was 6-12 weeks.

In the past 5 years, perhaps the greatest advancement in arthroscopic knee surgery is the arthroscopically assisted anterior cruciate ligament reconstruction. The anterior cruciate ligament lies within the center of the knee and prevents the tibia, or lower bone, from moving onto the femur or upper bone. This ligament is frequently injured in sports such as snow skiing, basketball, football, and volleyball. It is also injured in falls and automobile accidents. An injury to this ligament in the past ended many athletes' careers and caused major disabilities in the working population. By avoiding the large scars and trauma that were previously associated with open-knee ligament reconstruction, patients walked normal in two to three weeks. The procedure often requires 4-6 months of very extensive physical therapy and rehabilitation.

The arthroscope is also helpful in treating problems of the kneecap. The most common problem is that of chondromalacia, which is a softening of cartilage on the under-surface of the kneecap. The arthroscope and the arthroscopic instrument are useful in smoothing out rough areas, reducing the pain and returning the athlete to action. The arthroscope is also helpful in the treatment of kneecap dislocation or tracking problems. A lateral release is done either open or through an arthroscope by cutting the tissue on the outside of the kneecap, to reduce the pull on the kneecap, and move it into its proper location. Not all knee conditions need arthroscopy. Many knee conditions are adequately treated with medication, physical therapy and rehabilitation. If surgery is required, the amount of surgery required and the recovery may vary greatly from patient to patient.

A knee injury does not have to occur as a result of a sports activity. Knee injuries occur at work, in accidents and from the normal wear and tear of life. However, certain activities are more likely to cause knee injury. Someone is particularly susceptible if they play in physical contact sports like football. Snow skiing is another sport wear which results in a higher number of knee injuries. Any sport with quick stops and starts may cause problems with the knees; sports like basketball, tennis or volleyball. Running and high impact aerobics exercise can cause overuse problems which develop over time.

You can avoid knee injury by getting into good physical condition. The stronger the muscles are around your knees, the less likely you are to get hurt. Proper warm-up and cool-down are also important. Make sure your foot wear is appropriate and supportive. If you play field sports you should wear footwear that provides traction. If you are a runner or involved in running sports your shoes should have an excellent padding and support. By following the hints recommended by the physicians at the Jacksonville Orthopedic Institute, you can help prevent injuries in your workouts.

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Avoid “Weekend Warrior Syndrome” by easing into new sports activities. To prevent knee problems, the Jacksonville Orthopedic Institute offers the following hints:

1. Do proper warm-up and cool-down exercises.
2. Use stretching activities before and after exercises.
3. Use proper equipment (including proper shoes).
4. Do leg strengthening exercises either in the gym or at home.
5. Consult an orthopedist if you develop persistent knee pain.