ACHILLES TENDON RUPTURES

What is it?
An Achilles tendon rupture involves a complete tear of the tendon on the back of the ankle. It occurs most commonly in patients who are in their 30s to 40s but can happen at any age. It typically affects males more often than females.

Causes
Achilles tendon ruptures are seen in activities that involve sprinting or pushing off, such as basketball and tennis. Most ruptures happen without a specific injury, and most athletes do not have Achilles tendon pain prior to their rupture.

Risk factors
- Older age
- Poor flexibility
- Inactive lifestyle, or “weekend warrior” athletes who only exercise occasionally
- Steroid medications, either injected or taken by mouth
- Fluoroquinolone antibiotics, such as ciprofloxacin
- Certain medical conditions, including diabetes, gout, rheumatoid arthritis, and kidney disease
Symptoms
– Abrupt onset of pain
– A sense of being “kicked” over the back of the leg
– Hearing or feeling a “pop”
– Weakness, bruising, and/or swelling

Sports Medicine Evaluation
A sports medicine physician will examine the injury by looking and feeling for a tendon tear. The physician will test for a tear by squeezing the calf muscle and looking for movement of the foot. The injured foot will show no movement while the non-injured foot will move. A physician may obtain an x-ray to rule out any bone fracture. An MRI or ultrasound may be performed to evaluate the extent of the injury.

Treatment
Treatment initially involves pain relievers, rest, ice, compression, elevation, splinting the ankle, and crutches. Achilles tendon ruptures can be treated without surgery; this involves time, casting, and physical therapy. Surgical tendon repair may also be considered. The decision about surgical versus non-surgical treatment is made based on an athlete’s age, activity level, risk factors for re-tear, and underlying medical issues.

Injury Prevention
Athletes should properly warm up prior to activity. They should gradually increase their exercise program, especially those who are overweight or have taken a long break from regular exercise. Maintaining good ankle flexibility and strength are also important.

Return to Play
With both surgical and non-surgical approaches to treatment, athletes may expect at least 6 months prior to returning to activity.

References:
- Netter’s Sports Medicine; C. Madden, M. Putukian, C. Young, E. McCarty; 2010 Saunders Elsevier.
- 5-Minute Sports Medicine Consult; Mark Bracker; March 28, 2012; Lippincott Williams & Wilkins-Publisher.