THE SOUND OF A GUNSHOT
by Stephanie Frey

According to Dr. Rozbruch, “Achilles tendon ruptures are not difficult to diagnose if you know what you are looking for.” However, it is not uncommon for the injury to be misdiagnosed by non-orthopaedists.

Dr. Rozbruch recounts an instance when a patient came to him for a second opinion with an Achilles tendon injury that had been diagnosed at an hospital emergency room as an ankle sprain. Upon examination, Dr. Rozbruch realized the mistake and immediately treated the problem with surgery. Unfortunately, the patient had already been walking on the injury for two to three weeks prior to the discovery, thereby lengthening the recovery period.

Brents’ former partner Carter Reul experienced a similar situation. The initial diagnosis for his injury was a slightly torn Achilles tendon. Based on this analysis, Reul walked around for eight weeks thinking the injury would mend itself. During that time, significant scar tissue had built up. On the advice of a second doctor, he had it operated on, after which it took Reul almost a year to return to the game 100 percent.

Dr. Rozbruch counsels that injuries of this nature should be handled by an orthopaedic specialist not a general practitioner or emergency-room physician. “Not every emergency room physician is orthopaedically trained,” states Dr. Rozbruch.

Dr. Rozbruch also cautions those who suffer from Achilles tendinitis. “While it is not difficult to diagnose the problem, the suggested treatment is not always accurate.” The worst solution is to inject the tendon with cortisone. “Cortisone shots may reduce inflammation and pain but will ultimately weaken the tendon, making a full rupture more likely to occur,” he advises.

“A full rupture in an athletic individual,” Rozbruch believes, “merits surgery. A partial rupture in an athletic or non-athletic patient can be treated with casting. An inflamed Achilles’ tendon should be treated with rest.”

For Brents’ torn Achilles tendon, Dr. Rozbruch recommended surgical repair followed by casting and aggressive physical therapy.

The operation took one and a half hours. The procedure involved surgically sewing Brents’ tendon back together and augmenting it through localized grafting taken from the patient’s own tendons. This added extra strength. Upon completion, Brents was fitted with a hip-to-toe cast to immobilize and protect the leg and encourage healing of the surgery.

One day later, Brents was discharged from the hospital. One week later, the full leg cast was removed and replaced with a below-the-knee cast, which he wore for another seven weeks.
Recovery & Rehab

According to Dr. Rozbruch, the prognosis for recovery is determined by the type of injury. “If it’s very close to the bone, the more difficult it is to get a good result,” states Rozbruch. “If it’s up near the muscle, the better the results.” In Brents’ case, the injury was located in mid-tendon.

In addition to the type of injury and surgical technique, individual fitness, both physiological and psychological, are key factors in determining the length of recovery.

Mitzi Gerard, co-owner of Advanced Physical Therapy and Sports Rehab who has a master’s of science in physical therapy, says that Brents’ extraordinarily rapid recovery was primarily due to the active role he took in his rehabilitation. “He was an eager and willing participant,” Gerard states.

Upon removal of the cast, Gerard started Brents off with a fairly aggressive physical-therapy program that was to last three months. The initial phase consisted of hydrotherapy in a whirlpool, high-volt electrical stimulation, heat, ultrasound, deep-connective-tissue massage to stretch out the fibers in the muscle and work the tendon, range of motion exercises and therapeutic activities to strengthen and increase circulation to the area:

Gerard’s main goal during this time was to get the foot, which had been held in a downward or plantar flexed position, back to a neutral position so Brents could walk normally again. This first stage of recovery lasted six to eight weeks.

For the final phase of rehab, Gerard put Brents on the Biodex isokinetic-resistance equipment to build power and strength. This, along with skill-specific start-and-stop exercises in the advanced stages of therapy, enabled Brents to get back on the court.

Brents’ recovery was exceptionally fast. With this therapeutic approach, the normal time period before a patient recovering from Achilles tendon surgery can return to an aggressive, competitive level of play is generally six months. Brents took three.

“I have a 10-inch zigzag scar down the back of my leg,” he says. “It looks vicious, but I have no pain and full mobility.”

Dr. Rozbruch had several reasons for using the zigzag incision in Brents’ particular case. First was to avoid possible scar contracture that would have impeded Brents’ recovery process, and secondly, to avoid risking the formation of a keloid or thickened scar.

“Zigzag incisions help eliminate the axial pull on the incision during the healing process by shifting the tension away from the scar to the surrounding skin,” he explains. “In this manner, the elasticity of the skin can be optimized without ripping the scar.”

Dr. Rozbruch reserves this technique for athletes who require an accelerated recovery period and maximum stretch during play. He would not recommend it, for instance, to people who are concerned about its cosmetic aspects.

Brents’ Return

“For me to come back and actually step on a tennis court in the middle of July, then be declared fully recovered in August,” states Brents, “and then reach full speed on the platform tennis court in October was nothing short of miraculous.

“When I stepped onto the platform tennis court at the first tournament of the season in Philadelphia, my opponents looked at me as if they had seen a ghost,” exclaims Brents. “The opposition was totally unprepared for my return. They couldn’t gauge if I was there for serious competition or just for the fun of it.” The next day Brents and his partner reached the finals.

Brents, who is considered one of the quickest players in the game, even surprised his teammate. Partner Andy Kinney told him, “I watch you in the right-hand court, and can’t believe that you haven’t lost even a half a step.”

After the Rye tournament, the Brents-Kinney team was seeded number eight in the country. Brents would like to think his team has a shot at the championship. “Considering that I didn’t expect to be playing until January, our standing is terrific.”

Dr. Rozbruch and Mitzi Gerard offer the following tips to help prevent an Achilles tendon rupture:

- 10 to 15 minute warm-up of the calf and ankle muscles prior to play, using some type of aerobic activity:
  - running in place
  - bicycling
  - series of lateral, front, side-to-side movements

- leg and calf muscle stretches
  - runner’s stretch
  - stair stretch (heel extensions) - towel stretch

- leg and calf muscle strengthening
  - resistive sports cord or rubber band exercises
  - toe and heel raises.

Dr. Rozbruch also counsels that platform tennis players would do well to wear a slightly higher tennis shoe. “The higher the heel the less pull on the calf muscle during ambulation,” he explains.

For more on Dr. Rozbruch, visit www.JacobRozbruchMD.com