SPORTS MEDICINE



By Tim Schrader, M.D.



A Medical Odyssey

Ryan Stuart was Born to Play Football, or so Thought the High School Graduate from Thomasville, Ga.

Always a star athlete, Ryan excelled in baseball and football as a catcher and offensive lineman, two positions that can cause arthralgia. While playing middle school sports, Ryan noticed acute pain in his legs and hips that slowly became chronic. He visited a physician, who recommended rest for a year. For this two-sport star, the news was devastating.

In high school, the intensity of the pain increased. Physicians ordered a myriad of diagnostic workups, including blood tests, X-rays, magnetic resonance imaging (MRI) and full bone scans. Results were inconclusive, and Ryan was diagnosed with juvenile arthritis.

Physicians prescribed medication to ease the pain, but Ryan did not experience relief. He was then referred to Children's Healthcare of Atlanta where he was diagnosed with femoroacetabular impingement (FAI)—a condition that results from abnormal friction between the top of the femoral head and rim of the acetabulum. FAI is typically diagnosed using the patient's:

- History—beginning with pain associated with movements in the groin or hip area and then progressing to continuous pain in the same area
- Physical examination—limited internal rotation and pain with flexion, adduction and internal rotation (positive impingement sign)
- **Typical X-ray findings**—Acetabular retroversion and lack of femoral head/neck offset
 - An MRI scan is performed to confirm the anatomic bony abnormalities and look for coexisting labral and cartilage damage.

Shortly after Ryan's diagnosis, a surgical dislocation of the hip with acetabular rim trimming and a femoral head/neck osteoplasty was performed. The surgery involved a single incision about 7 to 10 inches, cutting the femoral head and dislocating the ball from the acetabulum, exposing all parts of the joint. This allowed for treatment of labral tears and abnormal contact between the femoral head and acetabulum.

Ryan then began the lengthy rehabilitation process. His therapy included isometric and active range of motion (AROM) exercises, gait re-education, stretching and hydrotherapy. Recovery time from most FAI surgical procedures is between four to six months. Eventually, Ryan returned to full, unrestricted activity and participated in sports again.

The pain had defined Ryan's life for so long, but finally, he could move forward. With his four years of debilitating hip pain as a foundation, Ryan hopes to help the next generation of athletes as he looks forward to studying sports medicine at the University of Alabama in the fall.

Ryan's struggle is not unique—an increasing number of teens and young adults are being diagnosed with FAI.

The patients are usually teens who continually complain of hip pain. They might have been told these are growing pains or have gone through different tests or physical therapy. Often, nothing is found, and they are told it might be early arthritis, and they might have to live with it. Doctors, patients and parents are perplexed.

These problems are mechanical and anatomical abnormalities of the hip. It then becomes a matter of how much damage the abnormality causes—sports typically exacerbate the situation.

Pediatricians and sports medicine providers who recognize student athletes with tightness in their hips or a decreased range of motion in their legs are key to early diagnosis and prevention of further damage to the native hip joint.

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