



## Liberty Hospital Physical Therapists Help Young Woman Rehabilitate From Knee Injury

**S**ixteen-year-old Tye Humphrey is like many young women her age. She excels at basketball, cheerleading, track and school. Unfortunately, another thing she has in common with other teenage girls and young women is a recent injury to her anterior cruciate ligament, better known as an ACL tear.

Humphrey injured her ACL in November 2006 in the second basketball game of the Lady Bulldogs' season. "I was going up for a rebound and when I came down, I landed the wrong way," Humphrey said. "I knew right away there was something wrong with my knee, but I kept playing. I didn't want to let the team down."

Humphrey's instinct was right—there was something wrong. She had torn her ACL. In January 2007 she had surgery to repair the injury, and just

a few days later the Gallatin, Mo. teen began rehabilitation with Craig Bolles, PT, a physical therapist with Liberty Hospital's Outpatient Rehabilitation Program.

"Tye is working hard not only to return to playing sports, but to prevent this from ever happening again," Bolles said. "We are concentrating on improving her jumping form and landing technique, two areas that frequently cause ACL injuries in women."

Jennifer Rivet, PT, another Liberty Hospital physical therapist, has a special interest in women's athletic injuries, and said a woman's anatomy makes her more prone to injury.

"ACL tears are four to eight times more common in young women, than in men," Rivet said. "There are lots of reasons for that, but one of the main problems is that the width of a woman's pelvis causes her body weight to be concentrated on the inside structure of the knee when she lands from a jump," Rivet said. "Women who play basketball, like Tye, or soccer, are more likely to experience an ACL tear."

Humphrey, who drives an hour to Liberty Hospital for her rehabilitation sessions twice each week, wants to get back to the active lifestyle she led before her ACL tear. "Right now my knee feels 100 percent, but I know if I try to put any stress on it, I'll just injure it again," Humphrey said. Bolles, her therapist, agreed and said she should be able to return to sports soon, providing her rehabilitation continues to go well.

"Craig and all of the therapists at Liberty Hospital have been awesome," Humphrey said. "With their help, my goal is to be back to 110 percent when school starts next fall. I don't want to sit out another season."

### Four Tips for Young Women Athletes

According to the American Academy of Orthopedic Surgery, ACL injuries among female basketball players are twice as likely to occur as in males. Female soccer players have four times as many injuries as their male counterparts.

The good news is ACL injuries can be prevented with proper training and conditioning. "We want to encourage young women to focus on injury prevention," Rivet said. "One study conducted with a college soccer program showed that when the female athletes were taught proper landing and cutting techniques, the team reduced ACL injuries by 80 percent." Rivet said the following tips can lower the risk of ACL injuries in young women athletes:

- Train and condition year-round. Skill drills and strength and flexibility exercises improve balance and coordination.
- Make strengthening exercises for the hamstring and quadricep muscles a part of a conditioning program.
- Practice proper landing technique from a jump. Land with the knees bent and on the ball of the foot, then rock back to the middle of the foot. Learn to do cutting maneuvers using a crouched position to pivot, rather than standing upright. Instead of coming to a stop with one big step, try three little ones, keeping the knees bent.
- Work with a coach or trainer to prevent injury.

To learn more about injury prevention in female athletes, contact Rivet at Liberty Hospital's Outpatient Rehabilitation Department, 816-407-2302.