Osgood-Schlatter disease (OSD) is a common overuse syndrome of the knee. It causes pain, swelling and tenderness below the knee at the attachment site of the patellar tendon (tibial tuberosity) on the shinbone (tibia). It is also referred to as Tibial Tuberosity apophysitis.

OSD affects pre-teen/adolescent kids. This is when the bones are typically growing at a faster rate. New bone forms from a cartilage growth plate (epiphysis) that is located at each end of the bone. Since cartilage is not as strong as bone, any stress on this growth plate area will cause it to become swollen and painful. During activities that involve a lot of running, jumping, bending or tumbling, the quadriceps muscles pull on the patellar tendon, which attaches near the epiphysis of the tibia. The patellar tendon may begin to pull away from the tibial tuberosity creating a visible bump, which is tender and painful during activity.

**Signs and symptoms of OSD**

- Pain, swelling and tenderness on the tibial tuberosity just below the knee cap
- Knee pain that worsens with activity- especially running, jumping, tumbling- improves with rest
- Tightness of the surrounding muscles, especially the quadriceps

The pain varies from person to person. Some have only mild pain while others may have constant even debilitating pain. This pain may last weeks to months during activities and may reoccur until the growth plates have closed and the bones have stopped growing.
Treatment
- Ice for 20 minutes after activity or when it becomes too painful to continue activity
- Use nonsteroidal anti-inflammatory drugs (NSAIDS) such as ibuprofen or acetaminophen for relief of pain.
- Protect the painful area with a knee pad or donut pad during activity
- Condition on a stationary bike or pool to relieve stress from running
- Lower body stretching program emphasizing the quadriceps, hamstrings and calf muscles
- Proper warm up and stretching prior to activity and cool down with stretching after

Return to Play
Most athletes can continue playing through a low level of pain with no further risk of injury. If the pain becomes severe and decreased function of the knee is noticed (limping, inability to jump, etc), they should discontinue activity and treat with ice and rest. They can gradually return to play as tolerated with pain and level of function as their guide. Seek medical advice from a physician if ice and rest do not provide any relief of symptoms.

Meet Dr. Mary Lloyd Ireland

Dr. Mary Lloyd Ireland is an orthopaedic surgeon at the University of Kentucky. She received her medical degree from the University of Tennessee and her residency was at the University of California, Irvine. Dr. Ireland served as Team Physician for EKU from 1988 to January 2006 and Team Physician for the University of Kentucky from 1985 to 1996. She has participated in the medical supervision of the United States Olympic Sports Festival in Minneapolis, Minnesota in 1990 and the Olympics in Barcelona, Spain in 1992. Dr. Ireland has published numerous articles and chapters. She is involved in numerous endeavors regarding gender differences, injury patterns, treatment and prevention of injuries of the knee and shoulder. She was noted in the April 2007 issue of Men's Health as one of the “Top Sports Medicine Specialists” in the USA. Dr. Ireland is active in both clinical practice and research work in sports medicine.
Taping a Thumb  
by David Jacobs, ATC

This tape job is for comfort of an injured thumb. It is to prevent excess movement that may be uncomfortable to the athlete.

Materials needed: pre-wrap or co-adhesive tape, 1-1/2inch athletic tape. Other types of elastic tape or other size athletic tape may also be used. For this demonstration, co-adhesive tape and 1-1/2inch athletic will be used.

Step One: Position hand to be taped as if holding something in that hand.

Step Two: Apply pre-wrap or co-adhesive to the thumb and wrist in a figure 8 fashion. (picture 1)

Step Three: Take the 1-1/2 athletic tape and measure the end of the roll from the 1st joint of the thumb to the middle of the wrist and tear the tape at that length. Grip one end of the torn piece of tape and rip it in the middle about ½ to 1 inch. Separate the torn tape and apply the tape to outside of the 1st joint of the thumb by wrapping it around the 1st joint of the thumb and pull it to the wrist and anchor it to the wrist. Repeat the process to the palm surface of the thumb and wrist. In this step, elastic tape of choice may also be used (picture 2 & 3).

Step Four: Apply a figure 8 to the wrist and thumb using 1-1.5 inch athletic tape to the area. (picture 4 & 5)

UK Coaches’ Symposium

The annual coaches’ medical symposium will be at the University of Kentucky on March 10, 2008 from 8am-1pm. Registration will begin at 7:15 am and breakfast is included. The cost of the symposium is $20 if you pre-register and $40 on site. Pamphlets including the topics that will be discussed at the symposium and registration forms will be sent by e-mail after the first of the year. For more information on the symposium, please e-mail Rob Ullery, ATC at rullery@uky.edu.
Nominate your Comeback Athlete

UK Sports Medicine is a proud sponsor of the Scholastic Ball Report, a high school sports show that airs every Saturday morning on WKYT. Once a month, we will recognize an athlete who has worked incredibly hard to come back to their sport from a challenging injury. This award sponsored by DonJoy will be presented at the end of the month on the Ball Report to this special athlete. If you would like to nominate an athlete for this award, please e-mail Kara at kmrohr2@uky.edu and let me know what this athlete has overcome in order to return to their sport safely. Please include your contact information; the name, sport, and school of the athlete; and a brief description of their injury.

UK Sports Medicine Walk-In Clinic

- With our sports injury walk-in clinic, no appointment is necessary.
- Walk-in at 7:30 - 8am.
- We’re located within Kentucky Clinic, with adjacent parking available.
- Staffed by sports medicine fellowship-trained physicians.
- Physical therapy and rehabilitation services are available.
- We’re proud to be the team physicians for all UK Athletics.
- Call (859) 323-5533 for more information.
- Or on the web at www.ukhealthcare.uky.edu/ortho