



Sports Shorts

GUIDELINES FOR PARENTS

Hip and Pelvis Injuries *Steven Cuff, MD, FAAP*

Injuries to the hip and pelvis in young athletes can be a cause of significant pain and lost time from sports. There are several injuries which are unique to young athletes because of their open growth plates. Growth plates are areas of growing bone in the immature skeleton, susceptible to injury because they are weaker than the surrounding muscles, ligaments and mature bone. While most growth plate injuries occur in the pre-adolescent or early adolescent period, in the pelvis they peak during mid to late adolescence because the pelvic growth plates form later and often do not close until the late teen years.

There are two main types of growth plate injuries in the pelvis- Apophysitis (growth plate inflammation/irritation) and Avulsion Fractures. Apophysitis is an overuse injury of gradual onset which may just seem like a muscle strain that just won't get better. Avulsion fractures are usually caused by an acute, traumatic event. Athletes may report feeling a pop while running or kicking, followed by significant pain and/or limp. Avulsion fractures are diagnosed by x-ray. Athletes with apophysitis benefit from rest and rehabilitation focused on muscle flexibility and strengthening. Avulsion fractures often require a period of crutches (days to weeks) to reduce pain and allow for healing before rehab. Very large fractures may require surgery.

Another hip injury seen only in adolescents and pre-adolescents is a SCFE (Slipped Capital Femoral Epiphysis), which occurs when part of the growth plate in the femur (thigh bone) shifts relative to the rest of the bone. Picture a scoop of ice cream falling off the cone. SCFEs typically occur between the ages of 8-15, are more common in boys and African-Americans, and can be associated with obesity, rapid growth among other things. Pain may be described in the hip, groin, thigh or knee which causes most kids to limp. If your child has these symptoms, have him/her evaluated right away as urgent surgery may be needed.

Muscle strains are common amongst all age groups. Adolescents may be at particular risk for these injuries because rapid growth can lead to muscle tightness, predisposing them to muscle injury. If not treated properly, muscle strains can become a lingering or reoccurring issue so most athletes (especially those with moderate to severe impairment) will benefit from activity modification, rehabilitation and a step-wise return to activity.

Overuse injuries such as stress fractures can occur as well, and take longer to heal compared to stress fractures in other parts of the body, sometimes up to 9-12 months, while others require surgical invention. These stress fractures are often not visible on x-ray, so MRI can be helpful in making the diagnosis.

Finally, femoral acetabular impingement (FAI) is increasingly being recognized as a source of hip pain in the adolescent athlete. This occurs when bone/cartilage gets pinched in the hip socket. Kids present with groin, hip or buttock pain worse with activities that involve hip flexion or prolonged sitting. Locking/catching may be present if there is an associated tear in the cartilage. Initial treatment is rest and rehabilitation, but if symptoms persist surgery may be necessary.

Tips for Athletes and Parents:

- (Pre)adolescents are at increased risk of injury because of susceptible growth plates and tight muscles
- Stretch consistently and warm-up properly before practices and games
- Don't ignore injuries, especially if they are getting worse over time, affect performance or cause pain with day-to-day activity
- Most hip/pelvis injuries can be treated effectively with proper rehabilitation if identified early
- Limping may be a sign of a more serious injury and should be evaluated by a certified athletic trainer or physician as soon as possible

This information is available on the Ohio Chapter, American Academy of Pediatrics' website at www.ohioaap.org