

## **Panner's Osteochondrosis**

Panner's disease is a condition that affects the end of the upper arm bone (humerus); it is the name for flattening of the end of the humerus on the outer side of the elbow. This area is called the capitellum. In children, bones grow at certain spots called growth plates. The growth plates are usually located at the end of the bone. In children with Panner's disease, the growth plate at the capitellum loses its blood supply and the nearby bone softens and collapses. This is most often seen in boys – but sometimes in girls – between the ages of 5 and 10. Usually their dominant arm is affected.

## **Symptoms**

The symptoms of Panner's disease include:

- Elbow pain, particularly on the outer side
- Pain that worsens with activity and improves with rest
- Limitation in elbow motion (inability to straighten the elbow completely)

## **Diagnosis**

The affected elbow will have specific pain on examination, and the amount of motion may be different than in the other (non-affected) elbow. X-rays may show the capitellum has lost its round shape and looks flat, which indicates that bone collapse has occurred.

## **Treatment**

Rest from sports involving elbow use is the recommended treatment. This needs to be done until the pain has been reduced and the X-rays show improvement. Physical therapy is rarely needed. Most individuals recover with very little treatment. Occasionally, casting is used if the pain does not resolve with rest alone. Over one to two years, the bone will remodel itself and the flattened capitellum will get back its normal round shape.

It is important for your physician to distinguish this relatively benign problem from osteochondritis dissecans (OCD) of the capitellum, which occurs in older kids and may require surgery to resolve. The goal is to return to sports as quickly and safely as possible. This should be done when there is no pain, and the elbow can bend and straighten normally.