

### **Osteochondritis Dissecans of the Capitellum**

Osteochondritis dissecans (OCD) of the outer elbow side of the arm bone, or capitellum, is a condition that results from repetitive trauma to the capitellum. It usually occurs in baseball players, but can occasionally happen in other athletes that throw overhead. It can be distinguished from the more benign Panner's disease, as Panner's is self-limiting, requires minimal treatment, and occurs in a younger age group.

OCD happens when the repetitive trauma results in a blood supply injury to the capitellum and the bone either fails to develop from the cartilage a child was born with, or the maturing bone dies and therefore softens and collapses. It can resolve without treatment, but often requires some intervention and occurs in an older age group (age 8 to 18).

#### **Symptoms**

Symptoms of OCD at the capitellum 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 the other (non-affected) elbow. X-rays will demonstrate the OCD in the capitellum. It may be important to obtain an MRI of the elbow to assess whether or not the OCD fragment has broken off from the arm bone or if there are any other problems.

#### **Treatment**

Rest from sports involving use of the elbow is the recommended treatment. Casting may be necessary. If there is no improvement after three months of rest, surgery is a good option. This would likely entail drilling the lesion with a small pin that can stimulate the OCD to heal. This process occasionally needs to be repeated. If the MRI suggests that the OCD is not attached, surgery should be done to attempt to put the OCD fragment back in place. If it is not fixable, removing the fragment is a reasonable choice to stop the pain.

Both X-rays and an MRI need to be done to assess the healing. A return to throwing sports should not be done until imaging studies show that the OCD is completely healed (even if there is no pain and motion has been fully restored). If it is not fully healed, the fragment can eventually break loose (often in young adulthood) and result in early arthritis of the elbow joint. The healing process can be as short as four months, or as long as two years.