

Osteochondritis Dissecans of the Capitellum

What you're feeling

This usually shows up as a dull, aching pain on the **outer side of the elbow**, often hard to point to exactly. It tends to be worse with activity – especially throwing, gymnastics, or anything that loads the arm – and eases with rest. Many young athletes notice they can't fully straighten the elbow anymore; that loss of the last few degrees of extension is common and often appears before the pain becomes a real problem.

If a piece of the joint surface has started to loosen, the elbow can begin to **catch, click or lock**, and it may swell after activity. A true locking episode – where the elbow jams and won't move for a moment – usually means a small fragment of cartilage and bone has broken free and is floating inside the joint. The condition most often affects **teenagers** who throw (baseball, cricket) or do gymnastics, where the outer elbow takes repeated pounding.

What's actually happening

The outer half of the elbow is a rounded knob of bone called the **capitellum**, capped with smooth cartilage. With repeated heavy loading through a growing elbow, a small patch of bone just beneath that cartilage can lose its blood supply and start to soften. This is **osteochondritis dissecans**, or OCD. The overlying cartilage may stay intact and heal, or the patch can crack, lift, and eventually separate into a **loose body**.

It's important not to confuse this with a milder, self-correcting childhood condition called **Panner's disease**, which affects younger children (typically under 10), settles on its own with rest, and doesn't leave lasting damage. True OCD happens in older children and adolescents and can cause permanent joint damage if a fragment breaks loose.

How the cartilage is doing matters enormously. A **stable** lesion – cartilage still firmly attached, growth plates still open – has a genuine chance of healing with rest alone. An **unstable** lesion – cracked, lifted, or already loose – generally won't heal on its own and usually needs surgery.

What we can do about it

The first and most important step for a **stable** lesion is simply to **stop the aggravating activity** – no throwing, no weight-bearing on the arm – often for several months, with a gradual return once the bone has healed on scans. In younger athletes whose growth plates are still open, many of these lesions heal completely this way. Rest is not “doing nothing”; it is the treatment.

When a lesion is **unstable**, has already formed a loose body, or fails to settle with rest, surgery is usually recommended. This is almost always done through **keyhole (arthroscopic) surgery** and the choice depends on the lesion:

- **Tidying up and stimulating healing** – removing the damaged fragment and making tiny holes in the exposed bone (microfracture) so a healing layer of new tissue forms. This works well for smaller lesions.
- **Fixing the fragment back down** – if the loose piece is large and of good quality, it can sometimes be pinned or screwed back into place.
- **Resurfacing the defect** – for large lesions, especially ones at the edge of the joint, healthy cartilage-and-bone plugs can be transplanted in to rebuild the surface (a graft procedure).

Your surgeon decides between these based on the lesion’s size, location and whether the cartilage is salvageable, usually guided by an MRI scan.

What to expect

The outlook is generally good, particularly when the problem is caught early and the lesion is still stable. Many young patients with stable lesions heal with rest and return to their sport. After surgery for unstable lesions, most patients get good pain relief and a worthwhile return of movement, and the majority of athletes are able to **return to sport**, though it can take several months and a structured rehabilitation programme.

A few honest caveats. Larger lesions, those reaching the outer edge of the joint, and elbows where the growth plates have already closed tend to do less well and are more likely to need surgery. Some loss of full extension may remain, and over the long term a significant lesion can slightly raise the risk of elbow arthritis later in life – which is exactly why early recognition and protecting the joint matter so much.

When to see someone

- **Persistent outer-elbow pain in a young thrower or gymnast** that doesn’t settle with a week or two of rest – get it assessed before pushing on.
- **Loss of full elbow extension** – not being able to straighten the elbow fully is an early warning sign worth checking.
- **Catching, clicking, or the elbow locking up** – this suggests a fragment may have loosened and needs imaging.

- **Swelling after activity** that keeps coming back.
- Any of these in a **skeletally immature athlete** deserves prompt attention, because lesions caught while the growth plates are still open have the best chance of healing without surgery.