

Knee Osteochondritis Dissecans

Osteochondritis dissecans (OCD) of the knee happens when repetitive trauma results in a blood supply injury to the end of the thigh bone and the bone either fails to develop from the cartilage your kid was born with, or the maturing bone dies and therefore softens and collapses. The OCD is comprised of bone and cartilage and can come loose and float around inside the joint. We know that this latter situation can lead to early arthritis.

Symptoms

Symptoms of knee OCD include:

- Most often there are no symptoms, only X-ray findings
- Pain that gets worse with activity and improves with rest
- Occasional joint locking
- Occasional swelling

Diagnosis

A physical exam can rule out other problems, but an X-ray will usually secure the diagnosis. An MRI is often done to assess the quality of the OCD and the risk for it to come loose.

Treatment

Treatment depends on many factors. Some children can be treated conservatively at first. This requires a long period of rest from physical activities, potentially even bracing or casting during this rest period. The length of time away from activities depends on your child's symptoms and how the follow up X-rays look.

If there is no improvement in the X-rays, or the symptoms, then surgery is a good backup treatment. If a large part of the joint is affected, or if pieces of bone and cartilage have already come loose, then surgery is a good first choice for treatment. Surgery can include removing or fixing loose pieces, or stimulating the OCD to heal by drilling it with a small wire. Unfortunately, OCD often requires a long period of rest from sports to allow for healing. The time until return-to-sports is different for each child, but should only be allowed when the X-ray or MRI demonstrates full healing of the lesion.