

Osteochondritis Dissecans

Osteochondritis dissecans (OCD) is a condition where a segment of bone just beneath the surface of a joint becomes damaged and dies away forming separation of a partial or complete bone fragment. The knee is a common joint for this to occur. When seen in the knee it usually affects the medial femoral condyle (60-70% of cases) but may also affect the lateral femoral condyle, the trochlea groove and occasionally the patella.

It is thought that osteochondritis dissecans is caused by repetitive loading to the knee joint causing a disruption in the blood supply to a segment of bone.

OCD may present in children and adults. The prognosis is very dependent on the age at which symptoms first develop. In young children who have not finished growing, the OCD has a very high chance of healing as long as the knee is not continually overloaded. Treatment is with crutches to prevent weight bearing for four to six weeks and then stopping all impact sports for a prolonged period usually allows the OCD lesion to heal.

In adults the prognosis is less good and many lesions do not heal spontaneously.

OCD has four stages progressing initially from a depressed section of bone with normal overlying cartilage progressing through to a detached stable fragment to a detached but non-displaced fragment with damaged overlying articular cartilage and finally to a displaced fragment from the joint surface.

Surgical treatment depends upon the stage of the disease and can involve drilling the lesion to stimulate more blood supply, pinning an unstable fragment in place or removing the fragment and treating the resulting defect with a cartilage graft.