### SHOULDER, KNEE & SPORTS MEDICINE

# Arthroscopic Treatment of Osteochondritis Dissecans (OCD) in the Knee

#### Indications

Osteochondritis dissecans (OCD) is a localized injury or condition affecting the bone just below the cartilage surface of a joint. OCD is often associated with repetitive trauma and sports. In OCD, the involved bone just below the joint surface fails and fractures from repetitive stress or from interruption of its local blood supply. Eventually, the overlying cartilage, not properly supported by the affected bone, can separate and an OCD fragment of bone and cartilage can break loose. If the OCD is stable (not loose) and the patient is still growing, conservative treatment of rest and protected weight bearing sometimes can allow it to heal. However, when the OCD lesion is more mature and has separated from the rest of the bone, either with the overlying cartilage intact, partially separated or completely separated (loose body), surgery often is needed to stimulate, graft, stabilize, or remove the OCD fragment. If neglected, the OCD may come loose, catch in the joint, (causing pain, locking, clicking, etc.) and leave a hole in the joint surface that will accelerate the wear and tear and arthritis of the



OCD lesion on X-Ray

knee joint. Arthroscopic surgery is indicated to evaluate, remove or repair these OCD fragments when they fail conservative treatment or are separating and unable to heal. It is unknown exactly what causes OCD to happen, but many theories exist including traumatic injury (direct injury to the joint), repetitive stress (overuse), loss of blood supply to the bone and abnormal bone formation.

### **Contraindications to Surgery**

- Infection in the knee
- Inability or unwillingness to complete the postoperative program of limiting activity after surgery and to complete the necessary rehabilitation



Chedule online now

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#### **Surgical Risks and Complications**

- Wound infection
- Bleeding or injury to blood vessels
- Injury to nerves (numbness, weakness, etc.)
- Non-union (non-healing) of the OCD fragment (in repair situations)
- Knee stiffness
- Arthritis

#### **Hospitalization and Anesthesia**

- Outpatient surgery (you go home the same day)
- General anesthesia with local anesthetic (numbing medicine injected at the surgical site)





Intraoperative images of retrograde drilling and bone grafting of an OCD lesion of the medial femoral condyle. Using X-ray guidance, a tunnel is drilled behind the cartilage to the lesion and filled with bone grafting material to create a stable joint surface. This is all done without disrupting the cartilage within the joint surface as shown above.



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### **General Surgical Technique**

Some OCDs can be repaired while others cannot, depending on the size, location, age, etc. of the lesion. In either situation, Dr. Chudik evaluates and treats OCDs through small limited incisions and specialized instruments of his own design with the use of an arthroscope (small camera). Lesions that cannot be repaired can be removed with special instruments and the hole left in the bone and cartilage can be smoothed of any rough edges or unstable flaps and stimulated to fill in with reparative tissue. Other OCD lesions can be repaired in a variety of ways depending on the location and size of the OCD lesion. Dr. Chudik developed novel techniques to be able to come in from behind the cartilage (retrograde) with drilling and bone grafting to fill the hole and create a stable joint surface. Dr. Chudik will discuss various options with you and help determine the best treatment for you.

### **Preoperative Instructions**

- Discontinue birth control pills
- Stop blood thinners such as aspirin, Coumadin<sup>®</sup>, Lovenox<sup>®</sup>, Xarelto<sup>®</sup> according to the prescribing doctor's directions
- Stop anti-inflammatory medicines such as ibuprofen, Advil<sup>®</sup>, Motrin<sup>®</sup>, Naprosyn<sup>®</sup>, Alleve<sup>®</sup>, etc.)
- Stop nutritional supplements and drinks like Vitamin C, ginseng, ginkgo biloba, etc.
- Stop smoking for surgery and during the first six weeks postoperatively to allow proper tissue healing

### Do not eat or drink anything from midnight, the evening before surgery

### **Postoperative Course**

- Crutches and non-weight bearing for six weeks OR hinged-knee brace locked in extension for six weeks depending on size and location of the lesion
- Return to school/sedentary work in less than one week as long as the extremity can be elevated
- Physical therapy to restore motion, strength, and proprioception (balance) for up to four to six months.
- After the knee is fully rehabilitated, **Dr. Chudik's Knee Functional Capacity Evaluation** is performed to determine that the knee is fully rehabilitated and more importantly, that any errors in movement patterns (known to put patients at risk for injuring their knee) are corrected and the patient can return to activities safely.



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### **Return to Activity**

- Return to gentle, daily activities about six to eight weeks after surgery
- Return to sports at the six to 12 months after surgery depending on the severity of the OCD lesion, sport and position

### Scheduling Surgery

Contact Dr. Chudik's surgery scheduler at 630-324-0402 or *contactus@chudikmd.com/* to:

- Schedule the date and location of surgery (the hospital will call the day before with the confirmed arrival time)
- Schedule a pre-operative appointment
- Schedule a post-operative appointment for ten to 14 days after surgery to remove sutures and review post-operative instructions

### Notify My Office if Symptoms Worsen





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