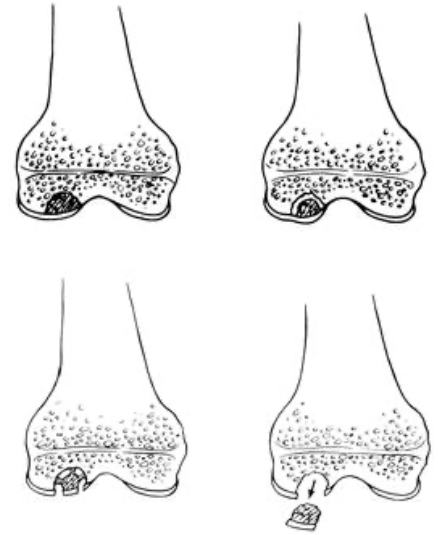


## **Osteochondritis Dissecans**

### **Description**

- Osteochondritis Dissecans is a condition affecting the joint surface resulting in separation of a portion of cartilage from the underlying bone
- The knee is the most common joint affected, followed by the ankle, elbow, and shoulder, but it can affect any joint
- The condition is more common in males



### **Signs and Symptoms**

- Swelling, intermittent pain, aching, buckling sensation, locking, or catching of joints
- Involvement of the knee may result in outward rotation of the affected foot
- Crackling sounds coming from within the joint during motion
- Some individuals may have no symptoms at all and be incidentally diagnosed by x-ray

### **Causes**

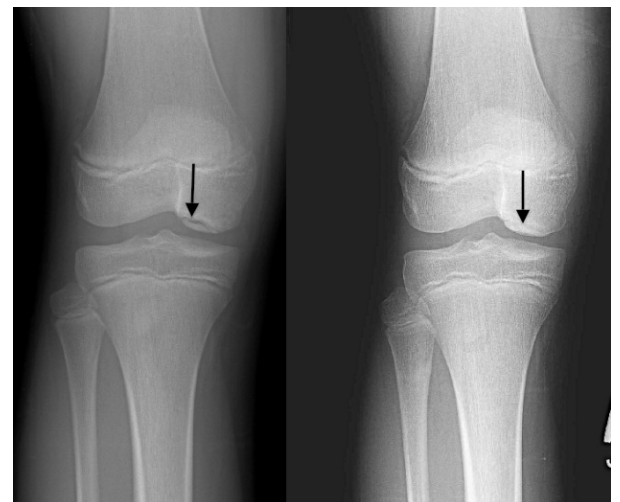
- The true cause of Osteochondritis Dissecans is unknown
- Some theories behind the mechanism are traumatic injury, repetitive stress, loss of blood supply, and/or abnormal bone formation

### **Risk Factors**

- Sports involving repetitive force such as running and year round participation in sports
- Obesity
- Family history of osteochondritis dissecans
- Bowlegs or knock knees
- Other joints affected with osteochondritis dissecans

### **Treatment**

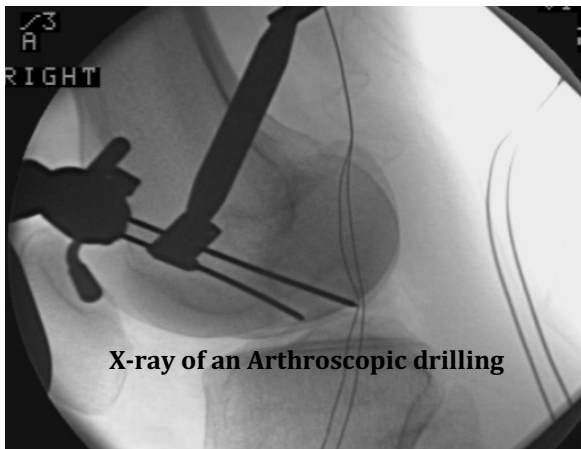
- The most successful outcomes are in individuals who are treated before reaching skeletal maturity
- If the cartilage is intact and the patient has yet to reach skeletal maturity, non-operative treatment is more likely to be successful. Those who are at or reaching



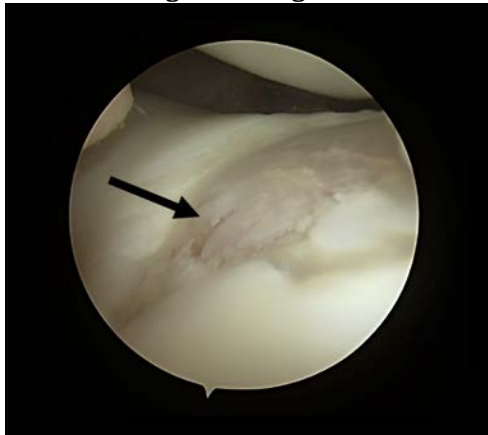
12-year-old girl with initial injury (left) and 3 months post-surgical treatment/drilling (right)

skeletal maturity may not improve with non-operative treatment, and are thus more likely to require surgery

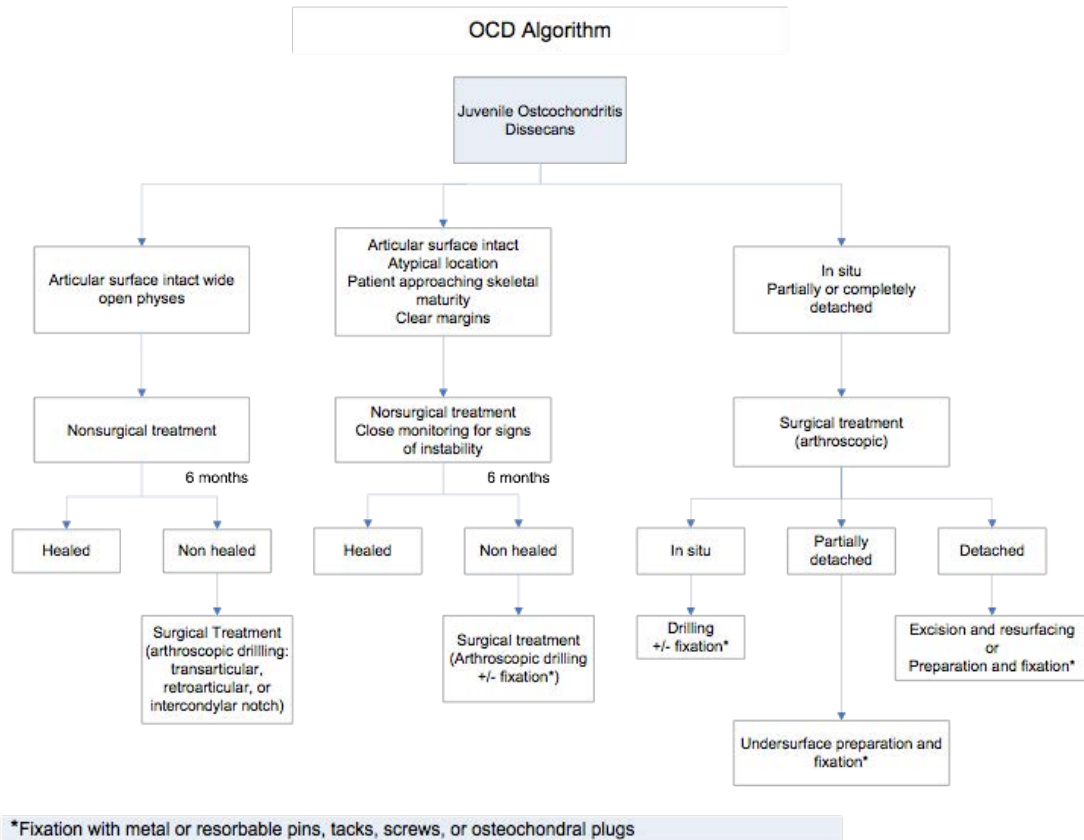
- Initial treatment consists of activity modification / cessation and if necessary pain medication (such as a non-steroidal anti-inflammatory like ibuprofen) and ice to reduce swelling and pain
- Walking with the assistance of crutches if the knee or ankle is involved until limping no longer persists is often recommended. The use of a brace or cast may also be recommended to limit motion and protect the joint in order to allow healing
- A referral to physical therapy for range-of-motion, stretching, and strengthening exercises is often recommended
- If pain persists after conservative treatment, or if loose fragments exist in the joint, surgery is recommended. Surgery may include arthroscopy and drilling of the bone in an attempt to stimulate healing if the articular cartilage covering the bone is intact. Possibly to remove of loose fragments and procedures to stimulate healing in the space left empty by the loose fragment, and/or reattachment of the fragment if possible



**Irregular healing in the empty space left following loose fragment removal**



- Strengthening and stretching of the injured, stiff, and weakened joint and surrounding muscles is necessary after treatment and may be performed with the help of a physical therapist



## Complications

- Recurrence of symptoms resulting in continued pain and swelling
- Arthritic degeneration of the affected joint
- Locking of the affected joint by loose fragments in the joint

## Contact the Office if:

- Symptoms fail to improve or worsen despite adequate treatment
- Any of the following occur after surgery:
  - Signs of infection such as fever, increased pain, swelling, redness, drainage, or bleeding in the surgical area
  - Pain, numbness, or coldness in the affected extremity
  - Blue, gray, or dusky color appears in the nail beds of the affected extremity
  - New, unexplained symptoms develop