

OSTEOCHONDRAL DISSECANS

DESCRIPTION

A localized injury or condition affecting a surface of the joint that involves a separation of a segment of cartilage and the underlying bone. This can occur in any joint, though it occurs most commonly in the knee, followed by the ankle, elbow, and shoulder. It occurs more frequently in males.

FREQUENT SIGNS AND SYMPTOMS

- Swelling, pain (often comes and goes), aching, giving way and “locking” or catching of joints. Feeling a piece of bone floating in the joint.
- Tendency to walk with foot of affected leg pointed outwards in cases involving the knee
- Crepitation (a crackling sound) within the joint with motion
- Often no symptoms (found when x-rays taken for other reasons)

CAUSES

Unknown, though many theories exist including, traumatic injury (direct force to the joint), repetitive stress (overuse), loss of blood supply to the bone and cartilage and abnormal bone formation.

RISK INCREASES WITH

- Sports with repetitive force including distance running or playing sports year round.
- Obesity
- Family history of osteochondritis dissecans
- Bowlegs or knock knees
- Other joints involved with osteochondritis dissecans

EXPECTED OUTCOME

Best success of treatment when treatment is sought before skeletal maturity. If cartilage is intact, non-operative treatment is more likely successful when still growing. After fully grown, there is a greater likelihood of it not healing and more often may require surgery (especially if the piece breaks off and becomes loose within the joint)

POSSIBLE COMPLICATIONS

- Frequent recurrence of symptoms resulting in a chronic, repetitive pain and swelling.
- Arthritis of the affected joint
- Loose bodies with locking of affected joint.

GENERAL TREATMENT CONSIDERATIONS

Initial treatment consists of medications and ice to relieve pain and reduce the swelling of the affected joint. For the knee or ankle, walking with crutches until you walk without a limp is often recommended (you may put full weight on the injured leg). Range of motion, stretching and strengthening exercises may be carried out at home, though referral to a physical therapist or athletic trainer may be recommended. Occasionally, your physician may recommend a brace, cast, and/or crutches (for the knee or ankle) to immobilize or protect the joint. For those with persistent pain after conservative treatment or loose fragments within the joint, surgery is usually recommended. Surgery may include arthroscopy to remove the loose fragments, procedures to stimulate healing into the space left empty by the loose fragment, and when possible, procedures to reattach the fragment (if large enough and not deformed). After immobilization and/or surgery, strengthening and stretching of the injured, stiff and weakened joint and surrounding muscles (due to the injury, surgery and/or the immobilization) is necessary. This may be done with or without the assistance of a physical therapist or trainer.

MEDICATION

- Non-steroidal anti-inflammatory medications, such as aspirin and ibuprofen (do not take if surgery planned in 7 days or less), or other minor pain relievers, such as acetaminophen, are often recommended. Take these as directed by your physician. Contact him/her immediately if any bleeding, stomach upset or an allergic reaction occurs.
- Strong pain relievers may be prescribed as necessary. Use only as directed and only as much as you need.

HEAT AND COLD:

- Cold is used to relieve pain and reduce inflammation for acute and chronic cases. Cold should be applied for 10 - 15 minutes every 2-3 hours for inflammation and pain, and immediately after any activity which aggravates your symptoms. Use ice packs or an ice massage.
- Heat may be used prior to performing stretching and strengthening activities prescribed by your physician, physical therapist or athletic trainer. Use heat pack or a warm soak.

NOTIFY OUR OFFICE IF:

- Symptoms get worse or do not improve in 2 weeks despite treatment.
- Any of the following occur after surgery:
 - Signs of infection: fever, increased pain, swelling, redness, drainage or bleeding in the surgical area.
 - You experience pain, numbness, or coldness in the foot (when surgery on the knee or ankle).
 - Blue, gray or dusky color appears in the toenails (when surgery on the knee or ankle)
- New, unexplained symptoms develop. Drugs used in treatment may produce side effects.