

LOOSE BODY IN A JOINT

What is a loose body?

A loose body is a free-floating piece of bone, cartilage or foreign object in a joint. The knee is the most common joint where one would find a loose body. They are usually the end result of a deeper problem. Causes of loose bodies in the knee include:

- Degenerative joint disease (osteoarthritis).
- A chip fracture.
- An object, such as a retained piece of hardware from a previous surgery, that may have become dislodged.
- Decreased blood supply to the bone (avascular necrosis), which may cause a piece of articular cartilage to separate from the bone (osteochondritis dissecans).

What are the symptoms of a loose body?

Loose bodies cause complaints of “locking” or catching. Sometimes patients can “shake” or position the knee to “unlock” the knee. The loose piece may be able to be palpated through the skin in several different areas of the knee. The locking occurs when the loose body gets caught in the articular surface of the joint, causing the knee to get “stuck” at an angle. Pain and swelling are common symptoms of a loose body.

How is a loose body diagnosed?

Your doctor may have a strong suspicion for a loose body based on the history provided by the patient and by performing a thorough physical examination. To confirm your doctor's suspicion, a series of appropriate X-rays should be obtained. These may reveal a bony or hardware related loose body. If there are no such findings on X-ray, an MRI may be recommended to assess for a soft tissue loose body, such as loose cartilage or meniscus.

What is the treatment for a loose body?

A loose body must, almost always, be removed from the knee joint surgically. Occasionally, a patient can “shake loose” their knee, in the case of a very small loose body, and become symptom free, as joint motion breaks the loose body down into tiny pieces that become lodged in the soft tissues of the knee. However, this is the exception rather than the rule.

Usually, arthroscopic surgery is warranted to remove the loose body, or, in the case of an osteochondritis dissecans, the loose piece of articular cartilage may be amenable to reattachment on the bone from which it parted from.

Some loose bodies can grow in size over time and may have to be removed through an “open” surgical procedure rather than an arthroscopic one. Occasionally these may be quarter to half dollar size although most loose bodies are smaller than a dime. In either case, these surgeries can be performed on an outpatient basis. Generally, about 6 weeks of post-operative physical therapy will be required to restore your motion, strength and function.

However, in the case of an osteochondritis dissecans fixation, there may be a 6 week post operative protection phase, with subsequent hardware removal, that may defer the initiation of physical therapy. In most cases of loose body removals, patients will notice an elimination of their pre-operative mechanical symptoms within several days after the procedure.

It is important to know that in many instances there may be more than one loose body. Occasionally a loose body may not be found despite the most vigilant look through the knee. The loose body/bodies can be identified in the vast majority of patients. Rarely, when noted in the back of the knee, the proximity to the major nerve and vascular structures may preclude removal. Frequently, the size and location of the identified loose body may necessitate a slightly larger skin incision (e.g ½ inch) to allow its removal.