

# **Baker's Cyst**

## **What is a Baker's cyst?**

A Baker's cyst is an accumulation of joint fluid, behind the knee. It is also known as a "popliteal cyst". A Baker's cyst is usually the result of a problem within the knee joint, such as arthritis or a cartilage (meniscus) tear. Both conditions can cause the knee joint to produce excess joint fluid, which accumulates in the back of the knee. Usually, a Baker's cyst does not cause long term harm. Treating the underlying problem usually relieves the swelling and discomfort caused by the cyst. The cysts occur most commonly in people 50-70 years of age, but can occur in much younger patients who have meniscal tears as the primary cause.

## **What are the signs and symptoms of a Baker's cyst?**

In some cases, Baker's cysts are small, cause no pain, and go unnoticed. Once they become larger, you may notice a bulge directly behind your knee and feel tightness there. Cysts can vary in size from an acorn to a large orange! Often time's patients will come to the office concerned that they may have a tumor. The cyst may produce swelling, pain and bruising, on the back of the knee and calf, if the cyst ruptures. If the cyst does rupture the fluid will migrate by gravity into the lower leg and may cause calf swelling that might mimic a blood clot.

## **What causes a Baker's cyst?**

The structures within your knee rely on a lubricating fluid called synovial fluid. This fluid helps your legs swing smoothly and reduces the friction on the moving parts of the knee. Synovial fluid passes through pouches, called bursa, throughout the knee. A valve-like system between the back of the knee and the bursa on the back of the knee regulates the amount of fluid going in and out of the bursa. Sometimes the knee produces too much synovial fluid, usually due to a meniscus (cartilage) tear, or, in an older person, arthritis. When the bursa in the back of the knee fills with excessive synovial fluid, the result is a bulge, called a Baker's cyst.

## **How is a Baker's cyst diagnosed?**

The diagnosis of a Baker's cyst can be suspected in the office setting, by visual inspection and palpation of the back of the knee. A non-invasive test, such as an MRI, can confirm the suspected diagnosis. If your doctor suspects a blood clot in the back of your knee or lower leg, due to excessive swelling, he or she may order an ultrasound test for a definitive diagnosis.

## **What is the treatment for a Baker's cyst?**

Typically, an orthopedic surgeon will treat the underlying cause rather than the Baker's cyst itself. If your doctor determines that a meniscus tear is the cause, he or she will recommend arthroscopic surgery to repair or remove the torn meniscus, subsequently resulting in the body's resorption of the cyst.

If the cyst is the result of an arthritic knee, your doctor may aspirate (drain) any excess synovial fluid from the knee and inject a corticosteroid medication, such as cortisone. This may relieve pain, but doesn't always prevent recurrence of the cyst. Aspirating the Baker's cyst itself is not effective, as it will often reaccumulate.

Although some surgeons recommend surgical excision of the cyst, we usually perform arthroscopic surgery that will indirectly result in cyst decompression. In our practice it has been very unusual to recommend excision of the cyst. Following excision the cyst can recur.

Physical therapy can be helpful for reducing swelling and improving overall knee strength and function.

You can take measures yourself to treat a Baker's cyst by following the P.R.I.C.E. principle: protection, rest, ice compression and elevation. Protect it by using crutches or a cane if you must, to allow for pain-free walking. Rest your leg. Ice for 20 minutes hourly to minimize pain and swelling. Use a compression sleeve for support and elevate your leg, especially at night.

Take a non-steroidal anti-inflammatory medication, such as Advil or Aleve, to assist in pain reduction.

Try to minimize your physical activity. This will reduce irritation of your knee joint.