

# Bakers Cyst - Popliteal Cyst



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**Popliteal Cyst more commonly known as Bakers Cyst is a fluid filled sack that is located in the back of the knee and is common disorder. Treatment is based on the size, symptoms and other associated conditions.**



Popliteal cyst more commonly known as Bakers cyst is a fluid filled mass that is located in the back of the knee. This condition is seen in all age groups but is most common in pediatric

middle age and older populations.

## **Etiology**

All joints produce fluid and this fluid provides lubrication and nutrition to the cartilage.

Approximately 70% of people have a small hole in the back part of the knee. Fluid from within the knee can escape out of this hole and can collect in the popliteal space. Normally the amount of fluid that escapes is not enough to form a cyst. However, if there is something torn, worn or damaged the knee joint will become inflamed and produce additional fluid. This fluid will accumulate in the knee and may leak out the back and form a cyst. Usually a cyst in an adult is a secondary sign that there may be some damage in the knee such as some arthritis (wear) or possibly a meniscus (cartilage) tear.

## **Presentation**

Patients with this condition will notice a mass in the posterior aspect of the knee. This lump is usually directly behind the knee in the area where the knee bends and medically is called the popliteal space. The cyst usually presents insidiously and is not associated with an injury. Frequently it will fluctuate in size and is usually more symptomatic the larger the size.

The symptoms of this condition will vary.

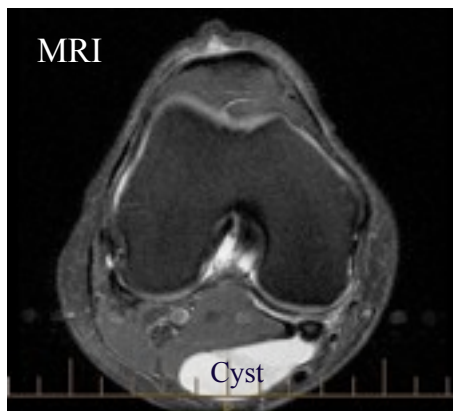
Commonly people will notice a slight pain in the back of the knee that is worse when the knee is flexed (bent). Stiffness is another complaint and usually correlated with the size of the mass. Swelling in the calf and numbness is less common and is usually seen in older age groups.

## **Exam**

In the office a mass is usually noted in the back of the knee usually more on the medial (toward the other knee) side. It is usually superficial and the borders are easily palpated. Other aspects of the exam may reveal bone spurs, crepitus (popping and clicking) or joint line tenderness.

One easy way to confirm the diagnosis is to see if the mass transilluminates. In a dark room a flashlight is placed directly over the area and if the mass has fluid, it will light up. This works best on thin people with a large mass.

Radiographs are usually normal but may show signs of arthritis or occasionally loose bodies will be seen in the cyst. The best way to visualize the cyst is with an ultrasound or an MRI.



MRI's are the preferred test because not only will it detect the mass but it will see if there is anything damaged inside the knee that is causing the joint lining to make additional fluid.

## Treatment

The treatment of Baker's cysts is dependent on a patient's symptoms. If a person is not having symptoms severe enough then it can be observed.

If the cyst is large and/or causing symptoms further exam is necessary to determine what is causing the fluid to develop. Radiographs may determine arthritis but frequently it may be a soft tissue disorder. A MRI is

needed to evaluate the knee for an injury to the joint surface or a meniscus tear (see meniscus treatment).

If the MRI determines that the cyst is not mult-loculated (multiple compartments) then one option is to aspirate the cyst with a needle and a syringe. Although all the fluid may not be removed, enough can be taken out that the symptoms are improved. The advantages of this, is that it can be performed in the office and has few side effects. The disadvantages of this procedure is that the cyst will frequently recur.

If an intra-articular problem such as a meniscus tear is identified then if this is treated the cyst may resolve. What I usually recommend is to perform an arthroscopy of the knee and treat the problem that causes the cyst. An arthroscopy is a less invasive procedure and the recovery is easier and quicker than excising the cyst. Quite frequently the cyst and the symptoms will gradually resolve.

If the cyst is large and there is not a specific cause for the fluid then surgical excision is an option. If this option is selected the first part of the procedure is to look inside the knee and treat any other associated problems. After that has been done an incision is made over the cyst on the posterior (back part) aspect of the knee. The cyst is identified and removed. Once removed the

opening in the back of the knee is identified and closed with suture. The leg is then covered with gauze and a compressive dressing.

## Post operative treatment

After surgery the leg and knee are elevated and iced. A brace may be used to take tension off the muscles in the back of the knee to allow the closure and the incision to heal. Range of motion is encouraged and physical therapy is started in the first week to ten days. Once the incision heals and the pain is improved exercises are increased and full activities can be resumed between six to ten weeks.

## Results

The results of surgical management are good. If the underlying cause of the cyst is treated most of the time the fluid will resolve and symptoms will improve. Usually the cyst will still be present but because it is much smaller symptoms will improve.

Surgical excision also gives favorable results. Once the incision heals the pain, stiffness and swelling disappears. The risk of the cyst recurring is approximately 10 to 15% with an excision.

If you have questions about this or other knee disorders please call Dr. David Oster's office to make an appointment. (303) 214-4500

