Popliteal Cysts

Introduction

Physical Therapy in Baton Rouge for Knee

Welcome to Peak Performance Physical Therapy’s patient resource about Popliteal Cysts.

A popliteal cyst, also called a Baker's cyst, is a soft, often painless bump that develops on the back of the knee. A cyst is usually nothing more than a bag of fluid. These cysts occur most often when the knee is damaged due to arthritis, gout, injury, or inflammation in the lining of the knee joint. Surgical treatment may be successful when the actual cause of the cyst is addressed. Otherwise, the cyst can come back again.

This guide will help you understand:

- how a popliteal cyst develops
- why a cyst can cause problems
- what can be done for the condition

Anatomy

What is a popliteal cyst?

The knee joint is formed where the thighbone (femur) meets the shinbone (tibia). A slick cushion of articular cartilage covers the surface ends of both of these bones so that they slide against one another smoothly. The articular cartilage is kept slippery by joint fluid made by the joint lining (the synovial
membrane). The fluid is contained in a soft tissue enclosure around the knee joint called the joint capsule.

**Knee Joint**

A popliteal cyst is a small, bag-like structure that forms when the joint lining produces too much fluid in the knee. The extra fluid builds up and pushes through the back part of the joint capsule, forming a cyst. The cyst squeezes out toward the back part of the knee in the area called the popliteal fossa, the indentation felt in the back part of the knee between the two hamstring tendons and the top part of the calf muscle.

**Popliteal Fossa**
Most people will be able to feel the cyst in the hollow area right behind the knee joint.


Knee Anatomy Introduction

Causes

Why does a popliteal cyst develop?

A popliteal cyst may form after damage to the joint capsule of the knee. The weakening of the joint capsule in the damaged area can cause the small sac of fluid to form. This can lead to a bulging of the joint capsule, much like what occurs when an inner tube bulges through a weak spot in a tire. The cyst may become larger over time.

A popliteal cyst can actually be a response to other conditions that cause swelling in the knee joint. This swelling is most often from problems of osteoarthritis or rheumatoid arthritis in the knee joint. It can also be caused by trauma, either from a direct blow to the knee or from repetitive activities that lead to overuse in the knee joint. A popliteal cyst is not from of a blood clot in the leg, although sometimes it can be mistaken for a blood clot.
The symptoms caused by a popliteal cyst are usually mild. You may have aching or tenderness with exercise or your knee may feel unsteady, as though it's going to give out. You may feel pain from the underlying cause of the cyst, such as arthritis, an injury, or a mechanical problem with the knee, for instance a tear in the meniscus. Along with these symptoms, you may also see or feel a bulge on the back of your knee. Anything that causes the knee to
swell and more fluid to fill the joint can make the cyst larger. It is common for a popliteal cyst to swell and shrink over time.

Sometimes a cyst will suddenly burst underneath the skin, causing pain and swelling in the calf. A ruptured popliteal cyst gives symptoms just like those of a blood clot in the leg, called *thrombophlebitis*. For this reason, it is important to determine right away the cause of the pain and swelling in the calf. Once the cyst ruptures, the fluid inside the cyst simply leaks into the calf and is absorbed by the body. In this case, you will no longer be able to see or feel the cyst. However, the cyst will probably return in a short time.

**Diagnosis**

When you visit Peak Performance Physical Therapy, we will ask you to describe the history of your problem. Then our Physical Therapist will examine your knee and leg. A physical exam is usually all that is needed to diagnose a popliteal cyst. Unless the cyst has ruptured, further testing is typically not needed.

**Ruptured Cyst**

Some patients may be referred to a doctor for further diagnosis. Once your diagnostic examination is complete, the Physical Therapists at Peak Performance Physical Therapy have treatment options that will help speed your recovery, so that you can more quickly return to your active lifestyle.

**Our Treatment**

**What can be done for the condition?**

There are two types of treatment for popliteal cysts: surgical and nonsurgical. Whether or not the cyst has ruptured, how painful the cyst has become, or how much it interferes with the normal use of your knee will determine which is the best course of treatment for you. In adults the treatment is most often nonsurgical. If
surgery is needed, it is usually done on an outpatient basis, meaning you can leave the hospital the same day. Unless there is a lot of discomfort from the cyst, surgery is rarely required.

**Non-surgical Rehabilitation**

Nonsurgical treatments are usually most effective when the underlying cause of the cyst is addressed. In other words, the effects of arthritis, gout, or injury to the knee need to be controlled.

Your Physical Therapist at Peak Performance Physical Therapy may use massage treatments, compression wraps, and electrical stimulation to reduce knee swelling. We may also use flexibility and strengthening exercises for the lower limb to help improve muscle balance in the knee.

Our Physical Therapy sessions sometimes include *iontophoresis*, which uses a mild electrical current to push anti-inflammatory medicine to the sore area. This treatment is especially helpful for patients who can't tolerate injections.

Although the time required for recovery varies, with nonsurgical rehabilitation, a popliteal cyst may improve in two to four weeks. Improvement, however, depends a great deal on improvement in the underlying condition (the problems that are causing the knee to swell). As long as the joint continues to swell, the size of the cyst will ebb and flow. If the knee is kept from swelling, the cyst won't swell.

If nonsurgical methods fail, complete removal of the cyst may be needed. Once they are reassured that the cyst is not dangerous, many people simply ignore the problem unless it becomes very painful.

**Post-surgical Rehabilitation**

If you have surgery to remove the cyst, you can resume your daily activities and work as soon as you are able. You should keep your knee propped up for several days to avoid swelling and throbbing. Take all medicines exactly as prescribed, and be sure to keep all follow-up appointments.

You may need to use crutches or a cane for awhile, and avoid vigorous exercise for six weeks after surgery. Although the time required for recovery is different for each patient, you should be able to resume driving about two weeks after surgery. Your Physical Therapist can then develop a personalized program to help you regain the strength in your leg.

Peak Performance Physical Therapy provides services for Physical Therapy in Baton Rouge.

**Surgery**

The goal of surgery is to remove the cyst and repair the hole in the joint lining where the cyst pushed through. Unfortunately, about half of the time the cyst comes back, or recurs, after being removed. Surgeons are cautious when suggesting surgery to remove a popliteal cyst because they are prone to recur. The cure is often permanent, but preventing further cysts depends a great deal on the success of treating the underlying cause. You should be aware that there is a very real chance that your cyst may return after being removed and there is no guarantee that the surgery will be successful.
Surgery can take more than an hour to complete. It is performed either under a general anesthetic, which causes you to sleep during the surgery, or using spinal anesthesia, which numbs the lower half of your body only. With spinal anesthesia, you may be awake during the surgery, but you won't be able to watch what's happening.

An incision will be made in the skin over the cyst.

The cyst is then located and separated from the surrounding tissues. The area of the joint capsule where the cyst appears to be coming from is identified.
A synthetic patch may be sewn in place to cover the hole in the joint capsule left by the removal of the cyst.

Your knee will be bandaged with a well-padded dressing and a splint for support.

Your surgeon will want to check your knee within five to seven days. Stitches will be removed after 10 to 14 days.

You may have some discomfort after surgery, and you will be given pain medicine to control the discomfort.

A popliteal cyst forms very near the major nerve and blood vessels of the leg. It is possible that these structures can be injured during surgery.

If an injury happens, it can be a serious complication. Injury to the nerves can cause numbness or weakness in the foot and lower leg. Injury to the blood vessels may require surgery to repair them.

In addition, it is uncommon but possible that another cyst can occur.

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