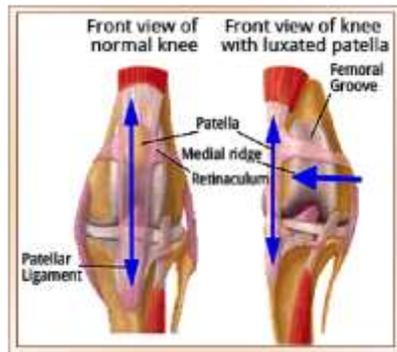




Luxating Patella

The patella (kneecap) is a bone covering the knee joint. It acts to protect the knee while providing a place for muscles to attach. Normally, the muscles and underlying bone structure keep the patella in place and the leg bends normally. When the patella luxates (moves out of place), the leg is no longer able to bend properly. This is why pets limp when they have a luxating patella.



A luxating patella (it may be called a trick knee) usually occurs in dogs and is hereditary. It is the result of a congenital defect but may also occur due to trauma. Small toy and miniature breed dogs tend to have kneecaps that move inward toward the body while large breed dogs tend to have kneecaps that move outward away from the body. It can affect one or both knees. When it occurs in cats, the luxation is usually toward the inside.

Signs

Limping is the most common sign of patellar luxation. If the luxation is minor, it may spontaneously occur and correct itself. This is most commonly seen when a dog is running then suddenly holds weight off a hind leg for a step or two then starts to use that leg again. This is known as “skipping”. A more serious luxation may cause your pet to be limping longer or refusing to use the leg at all. You may also notice that your dog is reluctant to jump.

Diagnosis

The doctor will palpate the knee joint either because your pet is limping or as part of a routine exam. She will flex and extend the leg while feeling the kneecap. If she is able to move the patella with mild pressure (causing a manual luxation) or feels it move on its own, the next step is to take x-rays of the joint.

X-rays allow visualization of the underlying bone structure to help determine the severity and treatment needed. X-rays also help rule out other causes of limping such as hairline fractures or torn knee ligaments.



Grading System

The grading system for a luxating patella is based on the severity of the luxation.

Normal or Grade 0: The patella cannot be manually luxated. The gait is normal.

Grade I: The patella can be manually luxated when the leg is extended but there is no lameness.

Grade II: The patella spontaneously luxates and returns to normal. There is intermittent “skipping” lameness.

Grade III: The patella stays luxated but returns to a normal position when moved manually with the leg extended. Lameness varies in severity from skipping to severe lameness.

Grade IV: The patella stays luxated and cannot be manually moved. The pet is usually unable to bear weight on that leg or unable to extend the leg fully.

Treatment

The severity of luxation will determine the treatment. A pet that has a Grade I or II luxating patella may only need physical therapy to strengthen the muscles while a pet with a Grade IV needs surgery to fix the luxation.

Initially, your pet may need pain medicine that also decreases inflammation. NSAIDs (non-steroidal anti-inflammatory drugs) are ideal if your pet is healthy enough. The doctor will perform the needed blood tests to determine if your pet can have NSAIDs. Laser therapy will also help and may avoid the use of drugs.

The type of surgery, if needed, depends on the type of luxation. The surgeon may change the soft tissue such as muscles or change the bone formation to allow for a more stable joint. Several factors will decide whether your pet has surgery including the severity of the luxation, your pet's lifestyle, and your finances.



Exercises designed to strengthen the leg muscles can improve a low-grade patellar luxation. Often a pet that has had knee surgery will also need physical therapy after surgery.

Joint supplements such as glucosamine and chondroitin will help protect the knee joint and decrease arthritis. Fish oil will decrease inflammation. Pets with a luxating patella should be lean. Being overweight will only put more stress on the knee joint and increase the chances of luxation. Help your pet lose weight if needed.

Make sure your pet doesn't over exert himself when exercising. Take shortened walks if needed. Avoid large open areas where your dog will likely push his body too much. Provide steps for cats to avoid jumping to high levels.

Often we diagnose pets without any signs with low-grade luxating patellas. These pets will likely live relatively pain-free and be fully functional when left untreated. However, it is best to start supplements to avoid arthritis that can set up in an unstable knee.