



Medial Luxating Patella

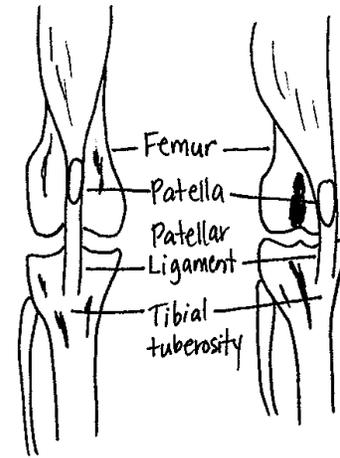
The patella, or kneecap, sits inside a groove overtop of the knee called the trochlear groove. A medial luxating patella is when the kneecap is displaced towards the inside, or medial, of the leg outside of the trochlear groove. This can be a cause of lameness or discomfort of the affected leg.

Clinical signs

- Intermittent lameness
- Holds limb up for a few steps
- Severe lameness when more advanced
- Bowing of limb

Who does this affect?

A medial luxating patella will most commonly affect small and toy breed dogs but can affect larger breed dogs as well. In larger breed dogs a lateral luxating patella can also occur. This is where the kneecap is displaced to the outside of the groove. A luxating patella be diagnosed at any age.



Normal Knee

Medial Luxating Patella

Figure 1: The knee on the left has normal conformation. The knee on the right has a kneecap that slips towards the inside, coming out of the trochlear groove. You can note that this motion will twist the tibia (lower bone) by noting the location of the insertion of the patellar tendon to the bone.



Why does this occur?

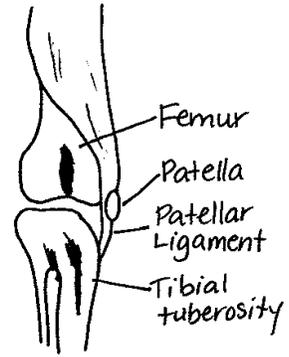
Dogs with a luxating patella will often have other types of limb abnormalities that contribute to luxating of the patella. There may be quadriceps muscle displacement, a bowing of the femur bone, rotation of the knee joint or deformity to the tibia bone. These changes may be present at birth or occur during growth and can worsen as the bones grow. During growth, the trochlear groove may not develop deep enough to keep the kneecap in place and therefore will allow it to slip in and out. If any of these changes are present they will encourage the patella to displace medially, like it is being “pulled” towards the inside. As time goes on the boney changes will become more pronounced and more difficult to correct.



Diagnosis

The diagnosis of a medial luxating patella is often made upon physical examination. The severity of the condition is graded out of IV with a grade I being the least affected and a grade IV being severely affected. A grade IV luxating patella is no longer able to physically stay within the trochlear groove for even a short amount of time.

Radiographs or x-rays of the limb will show the kneecap outside of the groove and may even show limb deformity if it is present.



Grade IV
Medial Luxating
Patella



Treatment

Medical management of patients with a luxating patella is common with patients that are asymptomatic. The treatment goal in these patients is to help prevent degenerative joint disease and arthritis and therefore starting on joint health supports early in life can be very helpful. Chronic monitoring is needed to ensure their comfort and that no clinical signs have changed in the condition.

Surgical treatment is recommended for young patients with advanced disease or patients who have discomfort or lameness associated with the limb. The surgical correction required will depend on the secondary changes that have occurred, such as bowing or rotation of the long bones. Typically, the trochlear groove is deepened and the quadriceps insertion is moved to help relieve the “pull”.

Prognosis

Patients who remain asymptomatic have a very good prognosis long term. Patients with an advanced condition who receive surgical intervention early will have a better prognosis than patients who do not receive surgical treatment or receive it very late.

It can be worrisome to learn of a diagnosis of a medial luxating patella in a loved pet. Your veterinary team at Nanaïmo Veterinary Hospital wants to work with you to help improve your pet’s quality of life. We want to work together to help you maintain the bond you have with your pet. We are here to support you and your pet along this journey.

Please contact us with any questions or concerns that you may have at 250-758-3985 or by email at nveth@shaw.ca

Figure 2: A grade IV medial luxating patella is the most severe. Note how the patellar ligament pulls on the tibia (lower bone) to twist it. This results in a bow-legged stance.

