

SOUTH COAST VET CARE ~ ANIMAL MATTERS

MEDIALY LUXATING PATELLA – *(Dislocating Kneecap)*

What causes a medially luxating patella?

The two causes are bowed legs and trauma.

Bowed legs occur in many small and a few medium sized breeds with certain individuals within each breed being worse than others. Because the thigh muscle inserts on the top of the shin bone via the patella and the patella ligament, any pull on this muscle in a bow legged dog will also pull the patella and its ligament to the middle. Over time this repeated pull to the middle weakens the outer side supporting structures that then stretch and allow the patella to dislocate.

Trauma can occur to any breed or sized dog and can result in damage to the outer side's support structures to the patella ligament or to the patella itself. A torn or ruptured ligament or a fractured patella result in the lengthening of this structure which allows it to dislocate.

In this case, the rupture or the fracture has to be surgically repaired to stabilize the knee and to return normal function to the thigh muscle.

What are the symptoms of a dislocating patella?

Many dogs don't appear to exhibit any obvious pain, especially if the problem has developed over a period of time. Because dogs don't know that their discomfort is not normal, they put up with it!

Initially they are able to run or jump as normal and will only refuse to do so when their kneecap is 'out'. If it pops out, they may skip or stretch that leg out because they learn that straightening their leg allows the kneecap to pop back 'in' again. And off they run again!

Over time, the kneecap is more difficult to return to its normal position and eventually remains permanently dislocated. Their stance is usually a bit 'duck footed' with their legs turned out, and they tend to waddle. They become increasingly more and more reluctant to run and jump, which is often put down to them 'getting old'. The knee is now severely arthritic.

Some dogs exhibit a lot of pain initially, with the more rapidly developing dislocation being the most painful.

Are there any complication associated with this condition?

Yes. As mentioned above, arthritis develops. The degree of arthritic degeneration varies from minor to severe and crippling. Arthritis is worse in those dogs whose medial condyle wears down as the patella pops back and forth over it until there is no protective cartilage left, only painful roughened exposed bone.

Affected dogs have an increased risk of anterior cruciate ligament rupture and meniscus (knee cartilage) damage.

How is a medially luxating patella corrected?

The only treatment for a medially luxating patella is surgery, the results of which are usually excellent.

The groove that the patella moves in is deepened using a modern technique called a 'wedgy trochoplasty'. The patella's outside joint capsule (which has been stretched and provides no support) is given a nip & tuck, called an 'imbrication'. Further lateral support for the patella is provided by the placement of a prosthesis from behind the knee, around the outside to the patella.

In very bad cases with marked tibial rotation, either a separate prosthesis is required to the front of the tibia to turn it out or the head of the tibia, where the patella ligament attaches, has to be relocated more in line with the pull of the patella ligament.

In some cases, the anterior cruciate ligament is already ruptured and is repaired at the same time.

In many cases, either both kneecaps are dislocated or the second kneecap is at an earlier, intermittent, stage of dislocation. Each kneecap can be repaired separately between 6 and 12 weeks apart to minimize the impact on the dog's activity levels or both kneecaps can be repaired at the same time, however you will have to provide additional home nursing care.

Patients usually rapidly return to excellent function.