



Patella Luxation

About the condition

What is a patella and what is its function?

The patella, commonly known as the kneecap, is a bone embedded in the knee extensor mechanism. It transmits force from the quadriceps muscle to the tibia (shin bone). During knee flexion and extension, the patella slides up and down in the groove at the lower end of the thigh bone, just above the knee joint.

What is patellar luxation?

Patellar luxation is a condition where the patella does not remain securely in its groove and can shift out of place. This condition ranges from mild (Grade I) to severe (Grade IV), based on the extent of the luxation. Typically, the patella dislocates medially (toward the body's midline), but it can also dislocate laterally (away from the body's midline).

Patellar luxation is generally a developmental issue, resulting from poor alignment of the hind limb and insufficient development of the trochlear groove.



The Surgical correction

Since patellar luxation is due to alignment problems, surgical intervention is the only effective treatment. During the procedure, we will evaluate the depth of the patellar groove. If it is found to be too shallow, we will deepen it (i.e., trochleoplasty). Then, a section of the tibia, or shin bone, will be cut and repositioned. This section will be stabilized with pins and wires (i.e., tibial tuberosity transposition).





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In many instances, these steps are sufficient to correct the alignment. In more severe cases, changing the bone conformation (femoral or tibial corrective osteotomy) or a prosthetic patellar groove replacement (PGR) will be indicated.

Complications - Like with any surgery, complication can occur. From our experience complication rate is low and is about 5 %. These include re-luxation of the patella, general anesthesia, infections of the surgical site, implant failures, bone fractures, and arthritis. Some cases may benefit from additional corrective surgery, if the patella continues to luxate after the first operation.



The Aftercare - Please read this form carefully

Patella Luxation correction surgery is a significant procedure, and adhering closely to these instructions is crucial for achieving the best possible outcome.



Exercise restrictions

During the first 12 weeks of healing, only slow LEAD toilet walks are allowed.

During the first 2 weeks, slow lead walks of 5 minutes three times a day are allowed. Walks should increase by 5 minutes per walk every week.

Trotting should be avoided as it intensifies forces on the surgery site. Running and jumping must be avoided entirely as they can lead to acute surgical failure. Slippery surfaces and stairs should also be avoided as they can stress the implants. Dogs should experience good comfort levels immediately after surgery and should start using the leg consistently within 1-3 days. It's the owner's responsibility to prevent excessive exercise.



Wound Care

Sutures are usually resorbable, under the skin and there is no need to be removed. Protect the surgical site with an Elizabethan collar for 14 days to prevent self-trauma. Clean, dry, and odour-free surgical wounds are expected, contact your vets if you notice any discharge or swelling.





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Medications

Your dog will be sent home with anti-inflammatories, painkillers and antibiotics. It's essential to adhere to the instructions provided. Please report any vomiting, diarrhea, or other unusual changes to your veterinarian immediately.



Recheck with your vet

Checkups with your vet are recommended at day 3 and day 10, 4 weeks and 8 weeks postoperative.

We strongly recommend follow-up X-rays at 8 weeks postoperative to evaluate the metal implants and bone healing. Your vets will share the X-rays with us for our careful evaluation. In the rare case where complications occur, follow up x-rays would allow us to act quickly, before the situation turns disastrous.

