

Surgical Repair of Medial Patellar Luxation (dislocating kneecap)

Your vet has arranged for me to see your cat because they are concerned that there is a problem with the kneecap dislocating from the groove on the front of the thigh bone (femur).

The problem usually starts with the kneecap dislocating spontaneously during exercise, often causing the cat to run for a few steps with the back leg held up off the ground. The kneecap usually relocates fairly quickly and the cat continues as normal without any lameness. This can happen a variable amount, and often becomes more frequent over time. At this stage the problem is a *mechanical lameness*, meaning that the leg is not working properly for those few steps, but is not usually painful.

Although at this stage the problem is fairly minor, it can progress in a number of different ways. The kneecap can stop relocating and end up permanently dislocated causing a persistent lameness. Other injuries to the knee may be more likely because of the extra strain on the joint. Osteoarthritis in the knee may develop. For this reason, surgery is usually recommended to stabilise the kneecap once it has started to dislocate by itself.

Why does the kneecap dislocate?

The kneecap is part of the *quadriceps mechanism*. The quadriceps muscle is the large muscle on the front of the thigh, which is connected to the pelvis above, and the shinbone below via the kneecap and a large tendon. In some cats the alignment of the quadriceps with the limb is poor and tends to drag the kneecap to the inside of the groove on the femur. If the kneecap has never been well located, the groove may also be shallower than it should be.

The Operation

Your practice will make arrangements with you to drop your pet off on the day of the surgery. Please don't give breakfast on the morning of the procedure. If they are receiving pain relief, they can have their pain relief the night before the operation, but if you normally give it in the morning then please don't give it on the day. Please let the nurse/vet admitting your dog know when they last had pain relief, and also if you will need a further supply of any medication. I will probably not meet you in person on the day of the procedure, but I will speak to you by phone if possible. If you have any questions based on the information in this sheet, then please feel free to ask me then. When I arrive at the practice, I will examine your cat and confirm the diagnosis and plan for surgery. If for any reason we need to alter the plan, I will contact you to discuss it.

Your cat will be mildly sedated to minimise stress, and then anaesthetised. Your cat's leg will be prepared for surgery. The leg will be shaved from hip to toe to give us a large clean zone to minimise the risk of infection.

The operation consists of three parts. The groove that the kneecap should run in is deepened (sulcoplasty), the point of attachment of the kneecap tendon is moved slightly to improve the alignment of the quadriceps muscle (tibial tuberosity transposition) and the tissues to the side of the knee are tightened to pull the kneecap over in the right direction (lateral imbrication). In some cases, if the tissues on the other side of the knee are very tight they may need to be cut to allow the kneecap to move over (medial release). The tibial tuberosity is secured with one or two pins depending on the size of your cat. These pins will probably remain in place for life. Occasionally if they cause a problem once the area is healed, they may need to be removed. Once these procedures have been completed the surgical site will be closed. In most cases there will be no skin stitches visible – all the stitches will be under the skin and dissolving.

In most cases your cat will be discharged from the practice the evening of the procedure. You will receive a printed discharge note from me which will give details of the procedure, medication and instructions for exercise. Your cat will receive an injection of painkiller immediately before going home and you will also generally have some further pain relief to give at bedtime. Nonetheless, on the night after a major operation like this you may find your pet is restless or agitated. You should make sure that you know how to contact your practice's out-of-hours service and also where you would need to go if your cat needed to be checked over, bearing in mind that this may not be at your usual practice premises.

EXERCISE & RECOVERY

Before surgery, please obtain a crate or cage for your cat to be confined to. This should be large enough to accommodate a litter tray, bed and food/water bowls. It is sensible to familiarise your cat with the crate before surgery and you can help them feel settled inside by adding some of your worn clothing so the crate contains familiar smells. It is also beneficial to wash and clean all of their bedding that they will use so that this provides a cleaner environment for recovery after surgery.

Your cat will be strictly rested for the first 6 weeks after surgery, and it is very important that you enforce this at all times. They should be restricted within the cage for the first 3 weeks following surgery. Thereafter, they can be allowed access to a single room with no opportunity for jumping and should be supervised whilst out the crate. Allowing too much exercise too soon during recovery is one of the most common causes of problems with the recovery from this surgery.

Physiotherapy is an excellent way to get the best possible recovery after orthopaedic surgery. We will provide some initial physiotherapy guidance after surgery, and your vet will be able to advise further on this, but I would also thoroughly recommend seeing a veterinary physiotherapist to help with rehabilitation.

It is important that your pet is not allowed to lick or interfere with their surgical wound until it has healed – please use a buster collar to prevent this if required. Licking, or handling, of the surgical area before the surgery wound is healed is the most likely way of introducing post-operative infection.

Your vet will arrange for your pet to have follow-up x-rays taken to assess healing of the surgery – this is normally performed about 6 weeks after the original procedure. We will assess these x-rays and provide further instructions at this time. In most instances, we hope for pets to be able to end crate restriction in the house after this time.

Risks of Surgery

This is a procedure with relatively low risks, and it is a procedure that for us is very routine. However, as you would expect for major surgery there are some risks.

1. Infection – Infection is a small risk of all surgery. We will take all the same precautions to avoid infection as I would take if I were performing the surgery at a specialist hospital (drapes, gowns, gloves etc). Your cat will also receive antibiotics during surgery. You should monitor the wound after surgery for any excessive redness, swelling or discharge. If an infection does develop it will generally resolve with further medical treatment. Very occasionally the area may need to be flushed.
2. Failure of the surgery – Sometimes, the kneecap continues to dislocate despite the procedures to relocate it. If this happens, we will discuss whether there are further options available to remedy the problem. The procedures described here are normally very reliable.
3. Osteoarthritis – Some degree of “wear and tear” in the joint is inevitable following the injury and no surgical procedure has ever been demonstrated to stop this. However, surgical treatment now is the best way to minimise this, and many cats will not be troubled by arthritis for many years.

There is a small risk associated with a general anaesthetic. Your vet may discuss with you whether you would like your cat to have a blood test prior to surgery to ensure that there are no underlying health problems that we were unaware of.

Thank you for entrusting the care of your pet to us, and I look forward to speaking to you on the day of the procedure.

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RCVS Advanced Practitioner in Small Animal Surgery**