

Post-operative care following TPLO surgery

What is a TPLO surgery?

TPLO stands for 'tibial plateau levelling osteotomy', which is a surgery that changes the dynamics of the dog's knee to stabilise it following a tear of the cranial cruciate ligament. Once the cranial cruciate ligament is torn, the tibia (shin bone) slides forwards when weight is placed on the leg. During the TPLO procedure, the tibia is cut and repositioned in order to level the slope at the top and prevent this sliding movement. The new position of the bone is held together with a specialised plate and screws whilst it heals (approximately 12 weeks).

Exercise

To allow for healing of the bone and to reduce the risk of complications such as implant failure, it is very important that your dog is kept under strict rest over the next 8 weeks. Patients should be restricted to either a large crate (in which they can turn around comfortably), a small pen or small room (without accessible furniture) for at least the first 4 weeks. Slippery floors should be avoided, so placing rugs or yoga mats on wooden/tile floors can be useful.

Running, jumping and climbing stairs or furniture should all be avoided for 12-weeks post-operatively.

Short lead-controlled walks are permitted for 5 minutes at a time 4-5 times daily, as early controlled/gentle use of the limb is beneficial. One or two small steps out to the garden are generally tolerated, as long as your dog is kept under close control.

Depending on your dog's progress at the recheck appointment at 4 weeks, access to one floor of the house is often allowed, with gradual increases in the length of lead-walks outside twice daily. Your vet will advise you on the exercise regime specific to your dog at this appointment.

Off-lead exercise is only allowed in gradual increments once bone-healing has been noted on the 8-week post-operative X-rays. Most patients can return to unrestricted exercise by 12 weeks post-operatively.

Wound care

Some swelling and bruising is expected, but please monitor the incision for signs of any discharge, excess swelling or redness. It is essential that an Elizabethan-collar is worn during the first few weeks to prevent any licking of the surgical site. Licking will lead to infection and can have severe consequences, which is especially important in orthopaedic surgery where sterile implants have been used.

The skin stitches have been placed internally and are dissolvable so do not require removal. It is recommended that your dog is seen by a vet or a nurse 7-10 days after surgery to monitor the healing process, but if you have any concerns then please contact the clinic sooner. If a dressing has been applied to the incision site, this can be left on until this appointment, but if it falls off before this time, it does not require replacing.

Swelling around the incision site and ankle can occur within the first week, but this should resolve with rest. If it does not, or if it gets worse over time, then please contact your vet. If tolerated, the incision can be ice-packed for 5-7 minutes 2-3 times daily by wrapping an icepack in a damp towel so that it does not directly contact the skin.

Medication

Anti-inflammatory medications are often prescribed as pain-relief and to reduce the swelling. Please give these as directed, often with food unless otherwise stated, and please stop these immediately if you notice any signs of vomiting or diarrhoea.

What to expect

Most dogs start to place weight on the affected limb within 5 days of surgery, with a gradual improvement in comfort and limb-use over the following 8 weeks. A limp is often still present at 4 weeks post-operatively, but this is usually an improvement on the pre-operative levels. This limp usually resolves by 8-12 weeks post-operatively, with most dogs going back to a normal active and athletic lifestyle without the need for further medication.

Some degree of arthritis does occur following a cranial cruciate ligament rupture, but this often progresses much slower in dogs that have had surgery. A useful resource explaining care for dogs with arthritis is www.caninearthritis.co.uk. Unfortunately, cranial cruciate ligament disease is a degenerative condition, so rupture of the other side is frequently seen too. This can be minimised by ensuring a lean bodyweight and not overloading the joints.

Follow-up appointments are usually booked at 7-10 days to check the incision site, at 4 weeks to assess mobility and comfort levels and at 8 weeks for follow-up X-rays.

If there is any deterioration in the lameness or swelling, particularly if there is a sudden non-weight bearing lameness, then please contact your vet.

Physiotherapy and hydrotherapy

To improve flexibility and joint-fluid production, gentle massage and passive range of motion exercises can be undertaken after the first 5 days, if your dog is comfortable enough. This often entails laying your pet on their side with the affected limb upwards and massaging the muscles above and below the knee. Following this, the leg can be gently flexed and extended until a small amount of resistance is felt, whilst supporting the leg to prevent twisting.

Supportive harnesses with chest support for the front legs can be useful to support your dog after surgery. Additionally, a sling or scarf can be used to support the back legs to give comfort and aid balance when mobilising in the early post-operative period.

Physiotherapy may be undertaken, ideally with an ACPAT or RAMP-registered physiotherapist. This is often started from 2-4 weeks post-operatively. Local registered physiotherapists can be found at www.acpat.org and www.rampregister.org.

Hydrotherapy can also be beneficial in certain cases. This can start following physiotherapy and after the 8-week post-operative X-rays. Local registered hydrotherapists can be found at www.canine-hydrotherapy.org and www.narch.org.uk.

Key points:

- Elizabethan collar worn at all times until incision is healed (approximately 2 weeks)
- Crate, pen or small room restriction until recheck at 4 weeks
- X-rays at 8 weeks
- No running, jumping and climbing stairs/furniture for 12-weeks
- Stop medication and contact vet if any vomiting/diarrhoea
- Recheck appointments at 7-10 days, 4 weeks and 8 weeks
- Any concerns or questions, please do not hesitate to contact the clinic