



Tibial Plateau Leveling Osteotomy

About the condition

Cranial Cruciate Ligament Rupture (CCLR) is the most common orthopedic condition in dogs. The stifle (knee) joint houses the cranial and caudal cruciate ligaments, arranged in a cross formation. Responsible for stabilizing the thigh bone (femur) in relation to the shin bone (tibia), these ligaments prevent instability. CRCL is a degenerative disease where the Cranial Cruciate Ligament progressively becomes weaker till rupture. The femur's movement on the tibial plateau, resembling a downhill slope, without intact cranial cruciate ligament, the joint become unstable, weight-bearing becomes compromised, leading to mechanical lameness, pain and eventual arthritis.



Currently, there's no definitive solution for preventing ligament degeneration. One approach is medical management, involving pain medication, stifle braces, and restricted exercise for the pet's lifetime. However, this method often yields unsatisfactory outcomes, including persistent pain, joint instability, and gradual joint deterioration, possibly leading to amputation in severe cases. Fortunately, surgery offers a promising alternative, with high success rates and minimal complications.

The Surgical Procedure – TPLO

The first part of the surgery involves surgical exploration of the knee joint and inspection of the cranial cruciate ligament and the menisci. Damaged ligament and meniscus are excise and removed from the joint.

The second part of the surgery involves reshaping the tibia to maintain joint stability. First, a circular cut is made in the upper portion of the tibia. Next, the weight-bearing surface is rotated. Once rotated adequately, the fragment is stabilized using a Locking TPLO plate and screws. This adjustment alters the angle of weight-bearing, eliminating the tibia bone sliding motion and given the stifle joint stability.





Information sheet - TPLO



The Aftercare - Please read this form carefully

TPLO is a significant procedure, and adhering closely to these instructions is crucial for achieving the best possible outcome.



Exercise restrictions

During the initial 10 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 subsequent 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.



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 vets

Checkups with your vet/nurse are recommended at day 3 and day 10 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.

