



SMALL ANIMAL ORTHOPAEDICS

Discharge Instructions Following Tibial Plateau Levelling Osteotomy (TPLO)

Arthrotomy and surgical stabilisation of the cranial cruciate ligament injury was performed today using a Tibial Plateau Levelling Osteotomy (TPLO), which works by altering the angle of the articulating surface of the tibia (shin bone) to allow function and weight bearing without having to rely on the cruciate ligament to hold the knee stable.

Surgery involved opening of the joint, examining and removing the damaged portions of cruciate ligament and examining the meniscus. Damaged portions of the medial meniscus, if present, were excised, leaving the remaining meniscus intact, as it is an important stabiliser and impact cushion inside the knee joint.

TPLO involved cutting the bone at the top of the shin, rotating the articulating surface and fixing in place with a metal plate and screws. The plate and screws will hold the bone in position during healing of approximately 8 weeks. The implants will remain in place for life unless they are causing concerns.

There should be a gradual and progressive improvement in weight bearing on the operated leg in the coming weeks, with toe-touching occurring in the first few days following surgery. Should there be any deterioration in the use of the leg at any stage, please contact your veterinarian for a routine follow-up examination. Review by SAO will be performed if required.

Mild to moderate swelling around the knee and lower part of the leg should resolve in the following 1-2 weeks. Massage and ice-heat therapy will aid this.

There is a surgical wound on the inside of the knee, with sutures holding the skin edges together lying under the skin surface. The sutures will not need to be removed. The skin will take 2 weeks to heal, and there should be NO licking of the wound, swimming, baths or excessive activity to allow wound healing without complication. It is important to check the wound daily for swelling, discharge or opening of the wound edges and contact your regular veterinarian should you be concerned.

An **Elizabethan collar should be used** to prevent licking at the wound. Licking or chewing of the wound is a very easy way to introduce infection and should be avoided.

Re-examination

Several routine examinations are advised in the early post-operative period to monitor for any signs of infection or complication.

DAY 4-7: Wound examination and fentanyl patch removal if placed.

DAY 10-14: Wound examination, dressing removal and assessment.

WEEK 6-8: Sedation and Xray of the implants to assess bone healing, and progress assessment.
Please fast your pet prior to these appointments in case sedation is required.

Medication

A course of antibiotics and anti-inflammatory medication will be dispensed. Please follow the label instructions carefully and contact your veterinarian should you have any queries. Should there be any gastrointestinal signs (vomiting, diarrhoea) please stop the medication and contact your veterinarian for further advice.

A fentanyl patch may be placed on the skin for pain relief and will be covered by an adhesive bandage. The patch will provide analgesia for 3-5 days. This may be removed after 4-5 days and disposed of in the household waste. Occasionally side effects may be observed and vary widely between patients, with the main effect being dysphoria (appearing high, overly quiet or over excitable) and loss of appetite. Should you notice any of these signs at home, please remove the patch and dispose of in the general waste. Patients have been known to eat the patches and currently I have not observed any signs of over- dosage, but please avoid this and monitor your patient carefully at home. Should you have any concerns contact your regular veterinarian or an emergency afterhours service if needed.

Rehabilitation

These are only meant to be guidelines and each patient's recovery is different.

As the owner you are the brains of the recovery and rehabilitation, as our patients will want to run before they can crawl, and risk injury to the healing bone and soft tissues causing set-backs to the recovery.

WEEK 1

Toe touching to the ground, but should be improving small amounts daily.

Strict Rest and Confinement or Strict Supervision

Short walks on a lead out to the backyard for toileting purposes only 2-6 times daily. On-lead at all times / No Stairs No jumping No swimming No baths

Ice Packs (24-48 hours) may be applied to the knee and lower leg 2-4 times daily for 20 minutes to minimise early post-operative swelling and help with pain relief. Do not apply the ice directly to the skin but use a cloth between.

Heat packs (after 48 hours) may be applied to the knee 2-4 times daily for 20 minutes to aid resolution of the swelling and promote circulation and healing. Ensure the heat pack is not too hot as to burn the skin but should be comfortably warm.

WEEK 2

Improving weight bearing on the leg, with a moderate to mild limp.

Strict Rest and Confinement or Strict Supervision.

Short walks on a lead out to the backyard for toileting purposes only 2-6 times daily. On-lead at all times / No Stairs No jumping No swimming No baths

Heat packs continued and applied to the knee 2-4 times daily for 20 minutes to aid resolution of the swelling and promote circulation and healing. Ensure the heat pack is not too hot as to burn the skin but should be comfortably warm.

WEEK 3+4

Progressively improving weight bearing on the leg. More comfortable with range of motion exercises.

Strict Rest and Confinement or Strict Supervision.

Gradually increase the length of lead controlled walks, 5-10 minutes, up to 2-6 times daily. Slow walks to encourage the use of the leg and placing correctly on the ground. If your pet limps more towards the end of the walk reduce the length of walk to a point which is well tolerated.

On-lead walks in chest deep water will encourage muscle building and knee stability. Avoid soft sand and beaches though.

On-lead at all times / No Stairs No jumping / Allowed Baths / Hydrotherapy may commence

Range of motion exercises may be performed 2-4 times daily. With the patient lying with the operated leg upper-most, and supporting the leg, gently flex and extend the knee slowly until you feel slight resistance or the patient shows signs of discomfort, for 10 repetitions.

**Patients may start to feel comfortable and want to over exercise before the bone and soft tissues are healed. It is essential the controlled program is followed to avoid major complications and set-backs in recovery.

WEEK 5+6

Progressively improving weight bearing on the leg with occasional limp.

Confinement or Strict Supervision.

Gradually increase the length of lead controlled walks, 10-20 minutes, up to 2-6 times daily. If your pet limps more towards the end of the walk reduce the length of walk to a point which is well tolerated for a few days then increase again gradually.

On-lead walks in chest deep water will encourage muscle building and knee stability. Avoid soft sand and beaches though.

On-lead at all times / No Stairs No jumping / Allowed Baths / Hydrotherapy and Swimming

Range of motion exercises may be performed 2-4 times daily. With the patient lying with the operated leg upper-most, and supporting the leg, gently flex and extend the knee slowly until you feel slight resistance or the patient shows signs of discomfort, for 10 repetitions.

Sit to Stand exercises performed 2-4 times daily, if well tolerated and only if comfortable.

WEEK 6-8

Good weight bearing on the leg, with occasional limp.

Confinement or Strict Supervision.

Lead controlled walks, 15-30 minutes, up to 2-4 times daily. Remember if your pet limps more towards the end of the walk reduce the length of walk to a point which is well tolerated for a few days then increasing again slowly.

On-lead at all times / No Stairs No jumping / Allowed Baths / Hydrotherapy and Swimming Range of motion exercises continued.

Sit to Stand exercises continued.

WEEK 8-12

Good weight bearing on the leg and improving stamina on walks.

Supervision.

Lead controlled walks, 20-40 minutes, up to 2-4 times daily.

Include going up a gentle inclines which will increase weight on the hind legs, if tolerated.

On-lead at all times / No Stairs No jumping / Allowed Baths / Hydrotherapy and Swimming

Sit to Stand exercises continued.

WEEK 12+

Good weight bearing. Gradual reintroduction to some gentle off lead walks and increasing on-lead walks.

Lead controlled walks, 30-40 minutes, up to 2-4 times daily.

Gradual reintroduction to short periods of gentle off-lead activity 5-10 minutes.

Gradual reintroduction to steps and stairs

Every patient is different and each recovery will and outcome will vary.

Take your time and try not to rush back to normal as there is a lot of healing required by the joint.

LONGER TERM

The prognosis is good to excellent in over 90% of patients, with the majority patients returning to normal athletic activity, depending on their condition and degree of osteoarthritis already present at the time of the injury.

Osteoarthritis is expected in all patients that have a joint injury, however this may be managed with maintaining a lean body condition, use of joint supplementation (fish oils, glucosamine/chondroitin, pentosan-polysulphate injections), use of anti-inflammatories, and moderation of exercise (the mind may be willing, but the body not able).

Should need any further advice on longer term management or assistance with weight loss, please contact your regular veterinarian.