The following instructions are intended to provide you with a guideline to the correct amount of exercise you can allow your pet. Please bear in mind these guidelines may need to be adapted for each individual patient.

A gradual improvement in use of the leg over time should be seen. Any sudden increase in lameness that persists for more than 24 hours is an indication for rest and prompt re-examination.

#### Week 0-1 - Strict rest

Room rest with short trips out on the lead only for toileting. 3 day post-op check.

#### Weeks 1-2 - Minimal exercise

House rest with frequent short lead walks of a few minutes on flat ground. 10 – 14 day post-op check.

### Week 2 - Physiotherapy and hydrotherapy

Can be commenced at this stage if required. This will depend upon progress.

#### Weeks 2-8 - Controlled lead exercise

Short lead walks on flat ground. Maximum 10 minutes duration initially, but several times daily.

#### Week 8 - Post-op x-ray

Confirmation of bone healing may be required by x-ray.

#### Weeks 8-12 - Increasing controlled exercise

Controlled lead walks several times daily increasing in length by five minutes per week. Decrease frequency of walks as length increases.

# Weeks 12-16 - Controlled exercise with increasing off lead activity

Long lead walks followed by 5 minutes off lead activity at the end. Increase off lead activity by 5 minutes per week. No playing with other dogs, jumping or ball chasing activities.

#### Weeks 16-20 - Controlled off lead activity

Unlimited duration walks and off lead activity but continue to avoid strenuous activities/jumping/playing.

## **Summary**

- The long term prognosis following cruciate surgery is usually good with most dogs being able to return to a reasonable level of activity.
- Knee joint arthritis is unfortunately inevitable following a cruciate injury, even when surgery has been performed, and this can require long term management in some patients.
- Preventing weight gain during the rehabilitation phase and maintaining a lean body condition long term is a key factor in minimising the effects of arthritis.



XLVets Small Animal member veterinary practices work together to share experience, knowledge and ideas to ensure the highest levels of quality and care for their client's pets. XLVet member practices provide a compassionate and caring service for all pets and at the same time offer comprehensive and up-to-date treatment in all fields of veterinary medicine and surgery.

# XLVets Fact Sheet



# POST-OPERATIVE CARE FOR MANAGEMENT OF CRANIAL CRUCIATE RUPTURE



Cruciate ligaments are important structures within the stifle (knee) joint necessary for joint stability and normal function.

Ligament rupture causes stifle pain and instability which can in turn lead to development of other painful problems such as meniscal (cartilage) damage and arthritis.

# **Surgical Procedure: Tibial Tuberosity Advancement (TTA)**

Your pet has had surgery to manage rupture of the cranial cruciate ligament.

The surgical procedure involves thorough exploration of the stifle (knee joint) to assess for injuries to other joint structures, especially the meniscal cartilages. Damaged meniscal cartilage needs to be removed as this can be a cause of ongoing pain and lameness.

Repair of the ruptured cruciate ligament is not feasible in dogs, alternative techniques have been developed to stabilise the joint without needing an intact cruciate ligament. The TTA procedure involves cutting the tibial bone adjacent to the stifle and altering its shape. The repositioned bone is held in place using metal plates and screws (figures 1, 2 and 3) until it has healed. This changes the biomechanics of the stifle allowing it to function in a stable manner without an intact cruciate ligament. As the stifle is no longer unstable, comfort and function levels improve post-operatively.



Figure 1: Knee x-ray before TTA surgery.



Figure 2:
Post-op x-ray
showing metal
implants fixing
displaced bone in
position.



Figure 3: 8 weeks post surgery – bone has healed.

# **Post-operative Care:**

The short term priority is to ensure your pet is comfortable and the surgical wound heals without complications:

- The knee may initially be more painful following surgery. Your pet will be prescribed pain relief to keep your dog comfortable. It should start bearing some weight on the leg within a few days and comfort levels should gradually improve.
- Licking, or self-trauma of the wound can cause infection and prevent normal wound healing. It is imperative this is not allowed and use of an Elizabethan collar may be required.
- Please monitor the wound for any discharge, bleeding or swelling. Some bruising following surgery is normal and should resolve over the following week. A soft, fluidy swelling in the lower leg is a common occurrence and usually resolves within a week.
- If you have any concerns about the appearance of the wound or your pet's comfort levels please contact your vet for advice.
- Please book follow up checks with your vet as directed. This will normally be three days and 10 days following the operation and thereafter depending upon progress.



#### Rehabilitation:

- Physiotherapy and hydrotherapy can play important roles in helping speed recovery. Your vet can advise on physiotherapy techniques to use immediately post surgery such as gentle massage and using cold packs on the knee. More aggressive physiotherapy techniques and hydrotherapy can usually be started from 2 weeks after surgery.
- Preventing over activity following cruciate surgery is extremely important. Allowing your pet too much activity too soon can increase the risk of serious complications which could require further surgery to resolve, or, even alter the long term success of the surgery.

It is important to appreciate that until the bone has fully healed the repair will be susceptible to injury if over stressed. Activity levels therefore must be carefully controlled. A follow up x-ray may be performed around 8 weeks post-op to assess for bone healing. Once this has been confirmed an increasing exercise regime can be started.

