

Post-Operative Instructions: TPLO

Thank you for entrusting us with your pet for its surgical care. Surgery for the correction of a cranial cruciate ligament rupture, specifically a Tibial Plateau Leveling Osteotomy (TPLO) will he needed. The cranial cruciate ligament (CCL), the equivalent to our anterior cruciate ligament (ACL), is essential to the stability of the stifle (knee) joint. The instability that follows a CCL tear causes inflammation and pain. If the instability is allowed to continue, the result will be cartilage degeneration, medial meniscal tear, and osteoarthritis. TPLO involves correction of the tibial plateau with an osteotomy (cut in the bone) and attachment of a stainless-steel bone plate to restore stability and function. It is essential to allow time to heal and to avoid re-injury during recuperation.

Please strictly follow the instructions below

Several factors contribute to the rupture of the CCL:

- Exaggerated Tibial plateau angle (slope)
- Breed dispositions
- Overweight conditions
- Decreased physical fitness

1. Activity:

- No running, jumping, free access to stairs, or rough playing with other pets or children.
- Do not allow any unrestricted or off-leash activity or slippery floors.
- Restrict activity for the next 2 weeks to allow complete healing of the surgical site.
- Activity must be limited to very short leash walks (5 minutes) three times daily just for the purpose of going outside to the bathroom only.
- 3rd to 6th weeks, confine your pet to an enclosed area such as a small room, dog run or dog crate when you are not home or when you are sleeping. After the 6-week recheck, you may gradually return her to full activity.

2. Incision:

- Please gently remove white bandage after I day.
- Monitor the incision daily for signs of infection such as excessive redness, swelling or discharge. If you observe any of these signs or if the surgical site suddenly becomes painful to the touch, please call us immediately.



- 3. It is normal for there to be bruising around the incision and swelling(edema) near the ankle. If you notice bruising, increase the number of times you are icing daily. If the ankle is swollen, please use a warm compress 2-3 times daily for 5-10 minutes and massage that area afterwards.
 - Ice the surgical site to help bring down swelling and bruising.
 - Your pet must wear an E-collar until the sutures are removed as licking can be a source of infection.
 - Keep the incision clean and dry (do not apply anything to the incision). No bathing or swimming for 14 days.

4. Medications:

- Give all medications as directed and call us if you believe your pet is having an adverse reaction to any of the prescriptions.
- If there is loss of appetite, begins vomiting or develops diarrhea or dark/tarry stools please call us immediately.
- We may prescribe sedatives for your pet's safety and to assist you in enforcing exercise restriction. It is important to note that most pets will begin to use the affected limb within 1 week of surgery (notify us if he/she is not!) but, you must continue to enforce the exercise restriction. Explosive, off-leash behavior can be result in reinjury or tearing the ccl of the opposite leg.

4. Food:

• Your pet should always have access to water and eat normal diet. <u>Tonight, feed 1/2</u> <u>their normal amount post-op. Keep it "light". Offer small amounts of water during the</u> <u>evening.</u> Tomorrow, continue feeding his/her normal diet. Feed 1/3 less than their normal amount while their activity level is restricted. We do not want weight gain during their recovery period.

5. Recovery:

- <u>Common side-effects of general anesthesia include constipation, decreased urine output, decreased appetite and/or thirst. Increased vocalization due to disorientation, a lack of coordination, and drowsiness is also possible.</u> Your pet may experience some or all of these side effects. These effects pass relatively quickly, and your pet should appear at least mostly normal to you within the next 24-72 hours after surgery.
- Your pet should show steady, continual improvement. If she/he seems lethargic, acutely painful, or simply not doing well please contact us.
- Your pet should progressively improve she ability to walk on the operated limb. Many patients will not walk on the limb initially but begin to walk on it over the next several



weeks. If your pet is not touching the leg down and using it within 7 days of surgery, please contact us.

Activity Restrictions

Weeks 1 through 6: No stair climbing, getting on the furniture or off-leash activities

Weeks 1 and 2: Outdoor sessions only for elimination purposes. Use sling support as needed.

Week 3: Start leashed walks two to three times a day, and if possible, enrolling in a supervised physical therapy program

Week 4 through 6: Increase length of time of walks by about 25% each week

Week 7: Start allowing off leash activity under supervision

Week 10: Gradually return to other pre-injury activities

6. Recheck

• Please schedule an appointment for suture removal 10-14 days after surgery

7. Questions:

• Our foremost interest is your pets rapid and complete recovery: Please do not hesitate to call VOC at 219.922.6000 if you have any questions or concerns.

** In case of an emergency. you may call North Central ER at (219)881-1600, Crossroads Animal Hospital or your closest emergency clinic.

Post-Operative Rehabilitation

The goal of post-surgical rehabilitation is to reduce inflammation, pain, and muscle atrophy, build strength, restore joint health, prevent muscle contracture, and maintain a healthy weight.

Restrict: Make sure to have a leash attached before opening the door.

Support: Use a towel or commercial sling around the waist to reduce workload on the opposite leg.



Limit: Block off all stairs that your dog could have access to.

Week One:

- 1. <u>Cold Therapy</u> (Start tonight) Perform for 5-10 minutes after exercise, 3-4 times/day.
- It is normal for the incision site to feel warm for a few days. Ice your pet's surgical site and make sure there is always a layer of cloth between hot/ cold packs. Never put directly on skin.
- Following PROM (Passive Range of Motion) and short leash walks, it is important to apply cold therapy to the affected knee and over the incision. Commercial gel ice packs may be used, or bags of frozen vegetables are recommended.
- Wrap ice packs in a light towel or pillowcase before applying to avoid excessive cold on your pet's sensitive skin.

2. <u>Massage</u> - Perform for 5-10 minutes, twice/day.

- Massage is best done with your pet lying on their side. Start by making your pet comfortable and pet them from their head to their tail, and then gently rub the thigh and hip of the affected limb.
- **3.** <u>PASSIVE RANGE OF MOTION (PROM)</u> (Start in 5 days) Perform 10 repetitions, 3-4 times/day. NOTE: Do not force PROM. If your pet seems uncomfortable, stop, and try again at another time.
- The goal of PROM is to manually simulate normal motions of the joint to maintain muscle and joint function. This is best done following massage and with your pet laying on their side. Starting with the ankle, then knee, then hip, gently extend and flex the joints. Be sure to support the leg carefully with your other hand while performing these movements keeping the leg level with the body.
- 4. <u>Slow and Controlled Leash Walks</u> Perform for 5 minutes, 3-4 times/day.
- At first, these walks should be for elimination purposes only. The slower your dog walks, the more likely they will use the repaired limb while walking. If needed, use a support harness or towel under the belly (abdomen) to support your pet's hind end.

REMEMBER: DO NOT ALLOW YOUR DOG TO RUN, JUMP OR CLIMB STAIRS DURING THIS PERIOD!



Week Two:

- 1. <u>Moist Heat</u> Perform for 10 minutes prior to exercise. NOTE: Heat should be the thigh, hip muscles, as well as the lower leg down to the paw. Avoid applying moist heat to the area of the incision applied to. Never apply heat if the surgery area is swollen or abnormally warm to the touch.
 - a. For moist heat therapy, you can use a commercial moist heat product. Avoid heating pads. Moist heat has been shown to penetrate tissue better than dry heat. Several types of moist heat are available in most drug stores. An alternate way to provide moist heat is with a hand towel soaked in warm water and wring out. The heat should be tolerable when placed on the inside of your forearm for 10 seconds.
- 2. <u>Massage Perform for 5-10 minutes, twice/day.</u>
- 3. <u>PASSIVE RANGE OF MOTION (PROM) Perform 10 repetitions, 3-4 times/day.</u>
- 4. <u>Slow and Controlled Leash Walks</u> Perform for 5 minutes, 3-4 times/day.
- 5. <u>Cold Therapy</u> Perform for 10-15 minutes after exercise.

Week Three:

- 1. Moist Heat Perform for 10 minutes prior to exercise.
- 2. <u>Massage</u> Perform for 5-10 minutes, twice a day.
- 3. <u>PASSIVE RANGE OF MOTION (PROM)</u> Perform 10 repetitions, 3-4 times/day.
- 4. Slow and Controlled Leash Walks Perform for 5-10 minutes, 3-5 times/ day on a flat surface.
- 5. <u>Cold Therapy DISCONTINUE</u> Post-therapy icing may be discontinued in week three if your dog is not experiencing apparent discomfort from exertion during exercises. The use of cold therapy may be resumed after exercises if your dog appears to be uncomfortable or if swelling increases.

Remember: Rest is good.

Week Four:

- 1. Moist Heat Perform for 10 minutes prior to exercise.
- 2. <u>Massage</u> Perform for 5-10 minutes, 3-4 times/day.
- 3. PASSIVE RANGE OF MOTION (PROM) Perform 10-20 minutes, once daily.
- 4. <u>Slow and Controlled Leash Walks</u> Perform for 10-20 minutes, 3-4 times/day.
- 5. Figure Eight Exercises Perform for 5 minutes, once a day.
 - Place 3-6 small obstacles in a row (e.g., chairs, pillows, etc.), approximately 3 feet apart. Walk your dog SLOWLY through the obstacles 4 times, making a figure eight pattern with WIDE TURNS. Rest between repetitions. This movement will help with restoration of your dog's balance and coordination.
- 6. <u>SIT-TO-STAND Exercises (PUPPY SQUATS)</u> Perform 5-7 repetitions, 2 times/day.



This exercise encourages extension/ flexion in rear leg joints and works the muscles. The object is to help your dog to sit down with good sitting posture and stand back up. Doing this exercise at feeding time or using a small treat to encourage may help. If your pet is unable to sit with the knees flexed comfortably, re-try this exercise each week until they are able to sit with proper sitting posture

Week Five and Six:

- 1. **DISCONTINUE MOIST HEAT, PROM AND MASSAGE** If your dog is consistently using the limb operated on, these modalities may be discontinued
- 2. <u>SIT-TO-STAND Exercises (PUPPY SQUATS)</u> Increase to 10 repetitions, 2 times/day.
- 3. <u>Figure Eight Exercises</u> Increase repetitions through obstacles, 2 times/day.
- 4. <u>Controlled Leash Walks (Incline)</u> Walk on a leash for 20-30 minutes, 2 times/day. Perform incline work, if accessible for 5-10 minutes, 1-2 times/day.
 - Walking on an incline shifts weight to your pet's hind legs, helping with limb use, flexion, and muscle building in the hind legs. Steeper inclines can be crossed at an angle if a more gradual incline is not accessible. The affected leg (the one operated on) should be placed downhill

IMPORTANT: If you notice increase lameness or discomfort after increasing any exercise, revert to the previous week's level of activity. For example: If during week three you notice that your dog becomes very fatigued after walking for 20 minutes, return to walking for 10-15 minutes until your dog tolerates this level of activity well for a few days, and then try to progress to 15-20 minutes of walking.

Week Six:

If you feel your pet is not progressing as expected, schedule a recheck appointment. That will likely incur a consultation fee. If you are pleased with your pet's progress, you may forward a video of your pet walking for Dr. Gendreau's assessment. There will be no charge.

- 1. SIT-TO-STAND Exercises (PUPPY SQUATS) Increase to 10-15 repetitions, 2 times/day
- 2. Figure Eight Exercises Increase repetitions.
- 3. Leash Walks (with intermittent light trotting) Start with short intervals of trotting during 20— 30-minute walks 3-4 times/day and increase as tolerated. Maintain leash control of your dog but allow a gradual increase in speed to a light trot when on a level surface. Do not allow your dog to become exhausted during this exercise.

Weeks After Six: (Weeks Six through Eight)



- 1. Stair Work 5-7 steps in a row, 1-3 times/day.
 - With your dog on a leash, slowly go up and down 5-7 stairs 1-2 times/ day. Increase the number of stairs/ frequencies each week. **DO NOT GIVE YOUR DOG FREE ACCESS TO STAIRS YET.** Always keep your dog on a leash while doing this exercise.
- 2. Walks, Incline Work, and Intermittent Trotting Perform for 30 minutes total, with intermittent intervals of controlled jogging for 20 feet. Continue interval walks 3-4 times/day.

(Weeks Eight through Ten)

- 1. SIT-TO-STAND exercises-Perform 10-15 repetition
 - Place your pet on a slight incline facing uphill. Encourage to sit and then stand, watching for correct posture.
- 2. Supervised Off leash or long leash Activity (AT WEEK EIGHT) In a carpeted area about 10'x10', spend 5-10 minutes throwing toys or playing fetch. Limit duration based on your pet's fatigue and comfort levels. Try this the first time after a longer walk so your dog is more tired.

Re-evaluation with surgeon is necessary if not close to 100% recovered or if unsure about progress

Thank you for allowing us the privilege of caring for your pet.

We offer this information as a complement to the specific verbal and written instructions that our staff may have discussed with you during consultation or your discharge appointment. It is intended to provide helpful guidelines for caring for your pet at home and is not meant to be an exhaustive list of all possible post-surgical orders or potential complications. As always, we rely on you to call if you have any questions or concerns regarding your pet's recovery and postoperative care.