Post Surgical Care of Bilateral Cruciate Ligament Rupture Repair

Home patient care after orthopedic surgery is critical to the success of the surgery. Allowing your pet too much activity may alter the anticipated outcome of the surgery. Remember, a ruptured ligament is a severe orthopedic injury and although surgery will slow the progression of existing arthritis and reduce pain, the joint will never be “good as new.”

Since your pet had surgery on both rear limbs, they will be too painful to bear weight immediately after surgery. Early weight bearing is very important to proper healing and most pets will not start using their operated limb for at least two weeks. These instructions are designed to help your pet start using their rear legs as soon as possible. Some pets that have a high tolerance for pain will start weight bearing as early as day two or three. Smaller patients or patients with a low tolerance for pain can take seven to ten days before they will stand on their legs. If your pet has not started standing by day ten, please call me for instructions.

The following instructions will be your guide to home care.

NOTE: If your pet is not using their legs fairly well (with a mild to moderate limp) by day 21 or stops improving week by week please call me to set up a time that you can come by my MASH truck for a recheck by me. Complications that are caught early are much easier to resolve than after several weeks have gone by.

Week 1:
1. Provide pain management with NSAID’s the first ten to fourteen days and Tramadol for three days.
2. Apply an ice-pack to the stifle (knee) for 10 to 15 minutes two to four times a day for the first 24 to 36 hours after surgery if no bandage
3. If inflammation has resolved after 72 hours, apply a hot-pack to the stifle for 10 to 15 minutes two or three times a day if no bandage
4. Perform passive range of motion exercise (gently flex and extend the knee); 10 slow repetitions three times a day (as much as bandage will allow if still on)
5. When taking your pet outside to eliminate, put a towel or leash under the rear legs as a sling to support the weight
6. Keep your pet confined to a small area with soft, padded bedding until they begin walking
7. Once standing or walking, continue to offer sling support to rear legs for first week

**Weeks 2 & 3:**

1. Apply a hot pack to the stifle for 10 to 15 minutes two or three times a day unless the swelling has resolved
2. If your pet’s limping or pain appears to worsen after running out of pain medication, please call and request a refill for as long as it continues to help.
3. Stop passive range of motion exercise if your pet is using the leg correctly
4. Start slow leash walks of 5 to 10 minutes three times a day
5. Schedule a recheck with your doctor 2 weeks after surgery to remove any sutures and evaluate range of motion and percent weight bearing
6. Most patients begin to walk gingerly by week 2, but every pet is different and some may take longer
7. Cats can start to roam the house but try to discourage jumping onto high places like counters

**Weeks 4 & 5:**

1. Increase the slow leash walks to 20 to 30 minutes two or three times daily
2. Have your pet perform 10 repetitions of sit-stand exercises three times a day (dog only)
3. Have your pet perform 10 to 15 repetitions of figure-of-eight walks two or three times a day, circling to the right and left (dog only)
4. Have your pet sit against a wall for 10 to 15 repetitions two or three times a day, keeping the affected knee next to the wall (dog only)
5. If available, swimming exercises for one to three minutes twice a day is helpful (dog only)
6. Cats should be well enough to have full house activity but no outside activity

**Weeks 6 - 8:**

1. Schedule another recheck with your doctor six weeks after surgery to evaluate your pet’s progress
2. Take your pet on leash walks for 30 to 40 minutes once a day, slow enough to ensure that your pet is weight bearing on the affected limb
3. Take your pet on incline walks or hills or ramps for 5 to 10 minutes once or twice a day (dog only)
4. Take your pet up a flight of stairs, if available, 5 to 10 times slowly twice a day (dog only)
5. Continue swimming if possible
Weeks 9 - 12:

At this point, your pet’s healing should be complete and should gradually return to full activity by the end of 12 weeks. Outdoor cats can now be allowed outside once again if no lameness is present.

1. Take your pet on faster 30 to 40 minute walks once or twice a day (dog only)
2. Take your pet for a run-straight only, no turns-for 10 to 15 minutes twice a day (dog only)

Additional Instructions:

1. Licking at the incision should be discouraged because it may lead to chewing at the sutures or staples causing a wound infection. It may be necessary to bandage the leg or use an Elizabethan collar to prevent licking.
2. Bandages, if used, should always be kept dry and clean. Any odors and/or persistent licking are indicators that there may be a potential problem and should be checked by your veterinarian immediately. Bandages and splints should be checked weekly by your veterinarian or veterinary technician.
3. Feed your pet its regular diet but reduce it by 10% to allow for reduced activity.
4. Mild swelling may occur near incision or low on limbs. Your veterinarian should check moderate or severe swelling immediately.
5. Use of a joint protective supplement with glucosamine and chondroitin or one of the special diets with joint supplements, is highly recommended for the life of your pet. Although there are over twenty brands of this nutraceutical, Dasuquin is the best supplement you can use. Cosequin is the next best.

Complications

As with any surgical procedure, complications can occur. Unlike human patients who can use a sling or crutches, our patients do not know enough to stay off a healing ligament so restricted activity is a major responsibility of you, the pet owner. Failure to follow these instructions carefully can lead to delayed healing or even failure of the new artificial ligament.

One patient in seventeen can develop a meniscal tear if the meniscus was not removed at surgery. We do not know if these are latent tears that were not visible at surgery or new tears that occur after surgery, but they are very painful and require a “second look” arthrotomy at a discounted fee to examine the meniscus and remove it if torn as they cannot heal on their own as there is no blood supply to the meniscus. The next most common complication is delayed healing, where, despite our best efforts to stabilize the joint, individual patients respond slower than others. Since we
sometimes place two sutures in larger breeds for security against premature rupture, some patients will have an audible “clicking” or “snapping” noise from the sutures rubbing against each other. This noise will stop over time in most cases as scar tissue builds up. Occasionally, your pet may develop a small pocket of fluid called a seroma, around the knots or metal implant we use to secure the new ligament on the inside of the knee. See your veterinarian if this swelling is larger than a grape. On rare occasions, especially in large muscled patients or patients with injuries several months old with severe swelling, the peroneal nerve which provides sensation to the top of the paw and controls the muscles that flex the paw can be inadvertently injured. If your pet seems to have serious leg pain or loss of sensation with foot dragging immediately after surgery, please notify me right away.

Infection is very rare, but does occur in about 2-3% of cases. If your pet’s knee appears very swollen, hot or tender and they are not using the leg well, it could be an infection. Most are minor infections that respond to Clindamycin for 4-6 weeks but if the infection is severe, the joint will need to be explored, cleaned out, cultured, and in most cases, have the implant removed. In most cases, there is a nominal fee to cover just the out of pocket costs or laboratory fees for the procedure.

A rare complication that can occur with Tightrope implants is a medial luxation of the patella (knee cap) bone. We do not know the reason this happens, but one in a hundred patients will have this occur and need a second surgery to secure the patella in it’s proper place, again at a nominal fee to cover surgical costs only.

If your pet is not using the leg somewhat by three weeks, please call Dr. Newman to set up a recheck. Additionally, if your pet starts using the leg and then stops using the leg or stops improving week by week or worsens week by week, call Dr. Newman to set up a recheck.

If you have any questions, please feel free to ask your veterinarian or call me at the number above.

Your pet had the following procedure(s) done:

☐ Cleaned out torn ligament remnants, inspected the cartilage (meniscus) and flushed out the joint

☐ Examined synovial lining of the joint for evidence of autoimmune (immune system attacks it’s own tissue) inflammatory disease. Biopsy recommended: yes / no / hold

☐ Performed a meniscal release procedure to minimize future tearing of the cartilage

☐ Removed torn or damaged medial/lateral meniscus cartilage

☐ Debrided and removed osteophytes around joint surfaces

☐ Found early, smooth osteophytes around joint surfaces that did not need removal

☐ Imbricated (tighten) the joint with sutures to help stabilize the joint
Placed a single / double lateral / medial Fiberwire / Nylon / Tightrope suture to replace the torn ligament and stabilize the joint

Injected Morphine (local analgesic) in the joint

Injected Adequan IA (joint protectant) in the joint

Injected Adequan (joint protectant) in the muscle

Follow Up Instructions:

Support / pressure bandage placed post-operatively; remove in _____ hours / days

Please monitor your pet’s ability to urinate over the next 1-2 days. Rarely, patients that had an epidural will have transient urinary retention, straining to urinate but no stream is observed. This can lead to a ruptured bladder after several days and kidney failure if you do not seek immediate treatment.

Feed your pet its regular diet but reduce it by 10% to allow for reduced activity.

Any swelling or redness near the incision should be checked immediately.

Recheck in 10 days: Sutures / Staples removal / Dissolving sutures

Recheck every 2 weeks after suture removal to evaluate progress

Please use an Elizabethan Collar on your pet after bandage removal to prevent licking of the incision as this is the number one cause infections

Tegaderm clear bandage can be left on until it falls off or at suture removal

All patients have their leg clipped of hair, scrubbed with chlorhexadine soap and alcohol to disinfect the skin for surgery. We also use an iodine impregnated adhesive drape on the leg to minimize post surgical infections. Some patients with sensitive skin may have a reaction to some or all of these substances and may appear to have very red or inflamed skin when the bandage is removed. This almost always resolves once the skin is exposed to the air and occasionally will need a topical ointment or steroid injection.

Start Keflex  Clindamycin  Baytril  Ciprofloxin tonight and give for ______ days

Start Rimadyl  Metacam  Previcox  Derramax  Zubrin pain medication tonight and give for 14 days (refill if limp worsens after running out for as long as it is helping)

Start Tramadol pain medication tonight and give for ____ days (refill if limp worsens after running out for as long as it is helping)
Start Dasuquin, Cosequin, or Glycoflex (joint supplement) and Omega 3 essential fatty acid supplement like cold water fish oils to reduce joint inflammation ASAP and use for 3 months to minimize osteoarthritis during healing for life due to underlying osteoarthritis go slow the progression over time.

Weight loss is very important for healing and to minimize risk of rupturing other leg (40% chance in all dogs and 75% chance in overweight dogs).

Call Rod Newman, MS, CCRP to schedule your initial physical therapy consultation at 615-414-4867 or email him at rnewman@caninerehabnashville.com (cost included in surgery fee).

If you want to do comprehensive physical therapy at home on your own, please visit www.topdoghealth.com and purchase a step by step guide to post-surgical home therapy for pet owners titled Cranial Cruciate Ligament Rupture for $19.95.