

MEDICAL MANAGEMENT OF TORN ACLS

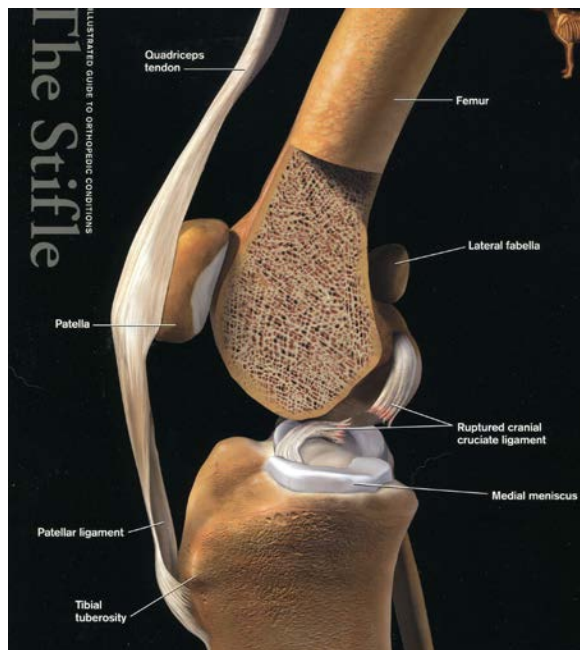
BY DR. ALEXANDRA RIPPERGER



The most common hind leg injury in large dogs is a tear in the cranial cruciate ligament (CCL), located deep inside the stifle joint. In humans, this same ligament is known as the anterior cruciate ligament (ACL) and the stifle is known as the knee, so that is what we commonly refer to this injury as – an ACL tear in the knee.

If your dog tears its ACL - what's next? An examination and x-rays of the joint confirm the injury, pain medication is begun, and we discuss options. Surgery is the gold standard for helping your pet regain normal function of its knee, but with a price tag of over \$3500, not including rehab afterwards, it is not feasible for many families. (An ACL tear is one of the best ways for pet insurance to turn out to be a good investment!)

If surgery is not an option, the alternative is rest and rehab. In addition to pain medication, glucosamine and fish oil supplements reduce inflammation and promote healthy joints. These both play a vital role in improving quality of life in dogs with torn ACLs. But what other non-surgical options do we have to promote healing and help your pet live comfortably?



Weight management or loss: Numerous studies have shown that overweight dogs are at much higher risk for torn cruciate ligaments than dogs who are of appropriate weight. A lean and fit dog is less likely to tear the ligament and more likely to have a partial tear than a full tear.

Additionally, research has shown a strong correlation between a dog's weight and age, and the severity of ACL degeneration; in other words, the older and more overweight your dog is, the higher the likelihood he or she may tear their ACL. If your dog is overweight, a top priority during medical management of a torn ACL is weight loss! In humans with knee pain or injury, losing as little as five pounds reduces pain by 15%.

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Exercise restriction: Does this mean strict cage rest? NO! We want to prevent hind limb muscle atrophy. It is recommended that your dog have 6-10 weeks of limited activity - no running, jumping or stair use. We recommend only short walks outside for bathroom breaks, and your dog should be confined to a small area or room when left alone. A "Help 'Em Up Harness" (helpemup.com) or "Walkabout Harness" (walkaboutHarnesses.com) can be helpful in assisting larger dogs with marked lameness or mobility issues during this time period.



After the initial period of rest, we will determine a plan for slowly increasing your dog's activity level over the next 3-12 months. Owners should be cautious of causing further injury to the knee if activity is increased too quickly.

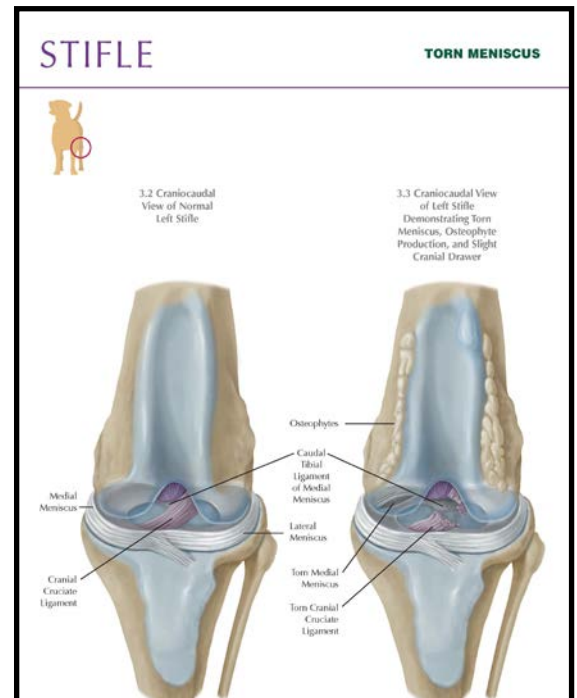
Therapy Laser: Many of our patients have benefited from "cold" laser. Laser therapy uses light to stimulate cell regeneration, increase blood circulation, and reduce

inflammation and pain. We typically recommend twice-weekly treatments for 3-4 weeks.

Rehabilitation exercises: These may include passive range-of-motion, massage, strength training, underwater treadmill therapy, and/or acupuncture. Did you know Dr. Boss is trained in canine rehabilitation, and we have an underwater treadmill at Best Friends?

Injections: There are numerous substances we can inject into your pet's knee, under sedation, that can provide benefits in the healing process.

- Platelet-rich plasma (PRP): PRP contains growth factors that reduce inflammation and increase collagen, which protects the cartilage in joints. This is a good option if your dog has a partial ACL tear, has significant inflammation, or joint fibrosis. Expect 2-3 injections over a 4-6 week period
- Hyaluronic acid (HA): HA acts as a lubricant and shock absorber in the joints. This is a good option for dogs with hind limb anatomic abnormalities, damaged menisci (see picture at right), or degeneration to the point of bone-on-bone contact. A single injection encourages growth of healthy cartilage cells, reduces inflammation, and decreases cartilage cell death.



Steroids: Two commonly used steroids for joint injections include methylprednisolone acetate and triamcinolone. These are good options for dogs with end-stage arthritis or when fast-acting relief is needed for very inflamed/swollen joints. The effects are immediate (within 24 hours) and last for months.

Braces: Knee braces are seldom used in veterinary medicine. We have little evidence of benefit, and a poor quality brace can actually worsen the situation. A custom brace is greatly preferred to a "one-size-fits-all" brace ordered online. A custom knee brace requires visits for casting and/or measurements to be taken, and some companies require pets to be sedated for this. Important considerations include breaking in the brace appropriately, monitoring for rubbing sores, and continued exercise restriction. A custom knee brace can cost as much as \$1500, which is a lot of money to spend for a device that may not provide any benefit.