

# Understanding CrCL Injuries and When TPLO Surgery is the Best Choice for Your Pet



## What is a Cranial Cruciate Ligament (CrCL) Injury?

The cranial cruciate ligament (CrCL) is a vital stabilizer in your pet's knee (stifle) joint. When the CrCL is injured or ruptured, it causes pain and instability, making it difficult for your pet to walk or play comfortably.

Rupture of the cranial cruciate ligament (CrCL) is a leading cause of hind limb lameness, pain, and knee arthritis in dogs. Unlike humans, dogs often suffer varying degrees of rupture, with partial tears being common. These partial tears almost always progress to a full tear over time, leading to what's known as "cranial cruciate ligament disease" (CrCLD). CrCLD invariably causes rear limb pain and dysfunction, though specific symptoms may vary. Early identification and management of CrCL injuries are crucial to prevent further damage and ensure the best outcome for your pet.

### Signs Your Pet May Have a CrCL Injury:

- Limping or favoring one leg
- Difficulty standing or sitting
- Swelling around the knee joint
- Reduced activity or reluctance to exercise

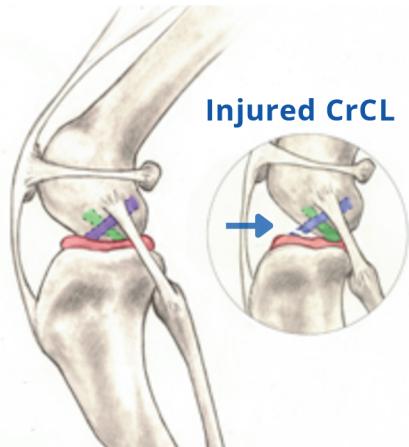
### Recommended Treatment options for CrCL Injuries

- TPLO (Tibial Plateau Leveling Osteotomy)** - A surgical procedure that changes the mechanics of the knee to stabilize it without relying on the damaged ligament. Considered the gold standard for large or active dogs.
- Minimally-Invasive TPLO (MI-TPLO) with Arthroscopy** (See Page 2)

### Additional Treatment options

**Lateral Suture (Extracapsular Repair)** - A synthetic suture is placed outside the joint to mimic the function of the torn ligament. Most effective for small, low activity dogs.

**Conservative Management** - Includes rest, weight management, physical therapy, and anti-inflammatory medications. May be appropriate for dogs with partial tears or limited activity levels, but often results in long-term joint instability and severe arthritis.



#### Illustration of a dog's knee:

Blue = cranial cruciate ligament

Red = meniscus

Green = caudal cruciate ligament

The image (right) shows a ruptured cranial cruciate ligament, causing the shinbone to displace forward and compress the meniscus.

\*Source: American College of Veterinary Surgeons (ACVS)

### Why We Recommend Tibial Plateau Leveling Osteotomy (TPLO) Surgery with Arthroscopy

TPLO is considered the gold standard for treating CCL injuries in dogs (and occasionally in cats) due to its high success rate and ability to restore normal joint function. Unlike other procedures, TPLO alters the biomechanics of the knee, eliminating the need for the CCL altogether and allowing your pet to regain full use of their leg. At H-Town, we use an innovative & minimally invasive form of TPLO, called **MI-TPLO**, which allows a smaller incision, fewer complications, and faster recovery rates.



Continued: **Arthroscopy** and Improving TPLO with **MI-TPLO (Minimally-Invasive TPLO)**

# The Next Level: Arthroscopy and MI-TPLO (Minimally-Invasive TPLO)



We pioneered and perfected the **Minimally-Invasive TPLO (MI-TPLO)**, which is currently the *safest & most effective* treatment of CrCL Tears.

At H-Town Veterinary Specialists, we use a Minimally-Invasive TPLO (MI-TPLO) approach, developed by our founder to improve safety, precision, and recovery for dogs with (CrCL) tears.

MI-TPLO uses **Arthroscopy** to assist in joint inspection and surgical planning. This technique allows for a smaller incision and minimizes soft tissue disruption, resulting in a more comfortable recovery and faster return to normal activity. While technically demanding, MI-TPLO is currently considered the most advanced and effective surgical method for CrCL repair.

## MI-TPLO Advantages

**Minimize Tissue Damage:** Arthroscopic joint inspection enables direct visualization of the joint using a small camera, allowing for a more accurate assessment of ligament damage with minimal tissue trauma. This enhances surgical precision and reduces the size of the incision.

**Improved Outcomes:** MI-TPLO has demonstrated higher rates of joint function restoration and pain reduction compared to traditional open techniques. Arthroscopy also increases the surgeon's ability to identify and address additional joint pathology during surgery.

**Reduced Pain and Recovery Time:** Minimally invasive techniques generally result in less postoperative pain, reduced swelling, and a faster return to mobility.

## What To Expect After Surgery

Your surgeon will speak with you before & after surgery to answer questions and help you decide the treatment that works best for you and your pet. After surgery, our team will walk you through your post-operative care plan to facilitate the best possible recovery for your pet. We also provide a F.A.Q. to help with potential questions that may arise after surgery.



No Treatment  
Severe Arthritis



MI-TPLO  
Minimal Arthritis

## The Impact of Untreated CrCL Tears:

These radiographs show two different dogs, each one year after a CrCL tear. The left image shows a patient who did not receive surgery, leading to severe joint degradation and chronic pain. The patient on the left will now need knee replacement surgery.

## Why Choose H-Town Veterinary Specialists?

- ✓ As a practice run by Veterinary Specialists, we are generally more flexible and less expensive than larger multispecialty hospitals.
- ✓ We see patients very quickly (often same day), unlike the 3-6 week wait time at other practices.
- ✓ Our surgeons perform over 500 CrCL surgeries every year, and are prepared for even the most difficult cases.

Week 0-2	→	Week 3-6	→	Week 6-8	→	Week 8-10	→	Post-10 Weeks
Crate Rest Limit Activity		Gradual Walks Leash Only		Gentle Rehab Range-of-Motion		Longer Walks Light Play		Gradual Return to Normal Activity Closely Monitor



**Call for a fast consultation**

(M-F 8am-5pm) 832.776.5574

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