Cruciate Ligament Injuries in Dogs: Understanding the Problem and Treatment Options

A sudden limp, reluctance to use a back leg, or difficulty getting up can be signs of a **cruciate ligament injury** — one of the most common orthopedic problems in dogs.

While it's a painful condition, the good news is that **surgical treatment can restore stability and function**, helping dogs return to an active, comfortable life.

What Is the Cranial Cruciate Ligament (CCL)?

The **cranial cruciate ligament (CCL)** in dogs — similar to the **ACL** in people — is a strong band of tissue inside the knee (stifle) joint.
It connects the femur (thigh bone) to the tibia (shin bone) and prevents the tibia from sliding forward.
When this ligament **tears or ruptures**, the knee becomes unstable, painful, and prone to arthritis.

Signs of a Cruciate Ligament Injury

- Sudden or ongoing **hind-limb lameness**
- **Difficulty rising or sitting**
- **Reluctance to jump or climb stairs**
- **Swelling** around the knee joint
- **"Toe-touching"** stance or holding one leg up

If left untreated, instability leads to **arthritis** and often injury of the opposite knee as well.

Treatment Options

1. Surgical Repair

Surgery is the most effective way to restore knee stability. Two main procedures are commonly performed:

🦴 TPLO vs. Extracapsular Repair: A Comparison Guide

Feature	TPLO (Tibial Plateau Leveling Osteotomy)	Extracapsular Repair (Lateral Suture Technique)
How It Works	The top of the tibia (shin bone) is cut, rotated, and stabilized with a metal plate and screws to change joint mechanics and eliminate the need for the cruciate ligament.	A strong nylon suture is placed outside the joint to mimic the ligament and stabilize the knee while scar tissue forms.
Best For	Medium to large dogs or active/athletic dogs.	Small to medium dogs (under ~25kg / 55 lb) or less active pets.
Surgical Complexity	Advanced — performed by experienced surgeons or specialists.	Simpler, less invasive procedure. Can be done in a general practice
Stability & Strength	Excellent long-term stability; well-suited for high-energy dogs.	Good stability in small/medium dogs; may loosen over time.
Recovery Time	8–12 weeks with gradual return to full activity.	8–10 weeks with controlled exercise.
Return to Activity	Most dogs can return to full activity, even running and agility.	Best for moderate activity; not ideal for intense sports.
Risk of Re-injury	Low in the repaired knee when properly healed.	Slightly higher risk if suture stretches or breaks.
Cost	Higher (due to implants and surgical expertise).	Lower cost overall.
Pros	Excellent outcome, durable, suitable for large dogs.	Less invasive, shorter surgery, effective for small dogs.
Cons	More invasive, requires bone healing, higher cost.	May not last as long in big or athletic dogs, possible suture breakage.

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2. Conservative (Non-Surgical) Management

In very small or sedentary dogs, or when surgery isn't an option, treatment may include:

- **Strict rest and controlled activity**
- **Pain and anti-inflammatory medication**
- **Weight management**
- **Joint supplements**
- **Physical rehabilitation therapy**

However, without surgery, the knee often remains unstable and arthritis can progress over time.

Recovery and Rehabilitation

No matter which surgical technique is used, **careful post-operative management** is key.

Typical recovery milestones:

- **Weeks 1–4:** Strict rest and short leash walks only
- **Weeks 4–8:** Gradual increase in exercise
- **Weeks 8–12:** Recheck X-rays; controlled return to normal activity

Physical therapy, laser therapy, or hydrotherapy can all help rebuild strength and speed recovery.

Long-Term Outlook

With proper surgery and rehabilitation, **most dogs make an excellent recovery** and return to an active, comfortable lifestyle.
Maintaining a **healthy weight** and **regular joint care** helps protect both knees for years to come.

Cruciate ligament injuries are painful but highly treatable.
Your veterinarian will help determine the best option for management based on your dog's size, activity level, and overall health.

Early diagnosis and surgical correction provide the best chance for a full, happy, and mobile life.