Cruciate ligament damage in dogs

Overview

The cruciate ligaments sit inside the knee joint, holding it together. In simple terms, they are like two pieces of strong elastic which connect the thigh bone to the shin bone.

If one of the cruciate ligaments is damaged the knee joint becomes wobbly and this is usually very painful. The most common way for a dog to damage a cruciate ligament is by jumping, skidding, twisting or turning awkwardly. The first symptom of a damaged cruciate ligament is usually limping. Any dog can injure their cruciate ligament but it’s more common in obese dogs and breeds with an inherited weakness.

Cruciate ligament damage can be treated with or without surgery; your vet will be able to discuss what is best for your dog. Book an appointment with your vet straight away if your dog is limping.
What is cruciate ligament damage?

The cruciate ligaments are two ligaments that sit inside the knee joint and help hold it together. Cruciate damage is an injury to one of the two ligaments, either a little tear or a compete break in the ligament (see image below).

How does it happen?

The ligaments can weaken over time like a fraying rope and then break, or more rarely can be broken suddenly by an injury.

A little tear usually causes less severe symptoms but if not managed very carefully it’s likely the ligament will snap completely at a later date.

A third of dogs that develop cruciate damage in one leg will develop it in the other leg at a later date.

Symptoms of cruciate damage

Cruciate ligament damage can cause symptoms from a slight limp to a dog being unable to put any weight on the leg at all.
Symptoms include:

- Holding a back leg up completely
- Mild limping (on one or both back legs)
- Stiffness or difficulty getting up after lying down
- Painful knee(s)
- Swollen knee(s), especially the inside of the knee
- Walking in an unusual way (stiff or unsteady gait)

When to contact your vet

Contact your vet if your dog is limping or has any of the other signs above.

You know your dog best. If they don’t have the symptoms listed above but you are still concerned it’s always best to contact your vet.

Treatment options

To diagnose cruciate disease your vet will feel for abnormal movement in the knee joint. Some dogs who are very tense or painful may need to be sedated for this. X-rays may also be recommended.

There are several treatment options for cruciate ligament damage and your vet will talk to you about which is best for your dog.

Treatment without surgery

Smaller dogs (under 10kg) and dogs with mild signs can sometimes recover without surgery.

Treatment usually includes:
- Rest
- Gradual, controlled return to exercise
- Pain relief for the first few weeks (Anti-inflammatories plus stronger pain relief as needed)
- Weight control
- Physiotherapy, if available

Treatment without surgery relies on the dog building extra strength around the knee joint which takes the strain off the broken cruciate ligament. Their pain has to be managed in the meantime. Recovery can take weeks to months and the aim is for your dog not to be in pain in the long term. Even with successful treatment some dogs might still walk with a slight limp (but no pain).

If this treatment isn’t successful, if your dog is over 10kg or they have severe symptoms surgery might be recommended.

**Surgery**

There are several different surgeries for cruciate disease. Speak to your vet about the best option for your dog. It will depend on their weight and size and whether referral to a specialist surgeon is an option for your dog.

After knee surgery for cruciate disease, there is a recovery period of several weeks. Your dog will still need all of the things listed under medical treatment and your vet will give you specific instructions tailored to your dog. It’s very important to follow these to make sure your dog has the best chance of recovery.

After recovering, your dog would be expected to go back to living a normal life, However, you will always need to take care to avoid strenuous exercise (jumping, skidding, chasing) to make sure your dog doesn’t don’t re-injure themselves.
Ongoing care

Arthritis
No matter which treatment is given, dogs who have had cruciate ligament damage nearly always develop arthritis later in life. For this reason, your vet might recommend joint supplements at the time of surgery and anti-inflammatory pain killers later in life.

Weight
Keeping your dog at the correct body weight reduces pressure on their joints and can help slow the development of arthritis.

Sensible exercise
Once your dog is recovered they will be able to exercise more or less normally. It’s best to avoid strenuous activities such as chasing a toy or jumping, this will minimise the risk of further injury.

Outlook
Cruciate disease can be very painful. If it is successfully treated and your dog recovers well, they can lead a relatively normal life. However, you will always need to take care to ensure your dog doesn’t injure themselves again.

Approximately one third of dogs who have had a cruciate ligament injury develop a similar problem in the other knee at some point later in their life.

Unfortunately, dogs that have had cruciate disease always get arthritis in the affected leg later in life. This is the case even with treatment.
Preventing cruciate disease

The following will help keep your dog’s joints healthy:

**Keep your dog slim**
Obesity puts lots of stress on all the leg joints and makes cruciate ligament injuries much more likely. Keeping your dog at the right weight will help their joints stay as healthy as possible.

**Sensible exercise**
Try to limit strenuous exercise like jumping, skidding and chasing. Keep your dog fit and don’t push them to do more than their body is used to.

**Which dogs are at risk of cruciate disease?**
Cruciate disease can happen to any dog. Obesity and strenuous exercise make a cruciate injury much more likely by putting lots of strain on your dog’s joints.

**Cost**
Cruciate disease can sometimes cost thousands of pounds to treat (this varies depending on the treatment needed).

Always speak to your vet if you can’t afford the treatment they have recommended, there may be other options.

If you are struggling with veterinary fees, PDSA offers free or reduced cost treatment to eligible clients. We strongly recommend insuring your dog as soon as you get them so that you are covered for any problems. Always check what level of cover you have and whether it is a ‘lifelong’ policy.