

Cora Based Levelling osteotomy (CBLO)

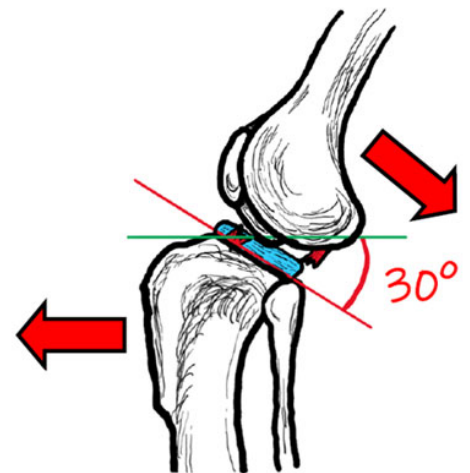
Cranial Cruciate Ligament Disease:

The main function of the cruciate ligaments is to prevent the tibia (shin bone) from sliding backwards and forwards in relation to the femur (thigh bone). This is important to ensure normal, pain-free function of the knee joint.

In dogs, the cranial cruciate ligament (CCL) slowly degenerates and weakens over time (like a fraying rope), until it is unable to withstand the forces of normal movement. We do not know the exact cause of this degeneration but genetics likely play a role as certain breeds are more commonly affected. Other factors, such as being overweight, the shape of the leg and hormones, also influence whether a dog will be affected.

Approximately 40-50% of dogs affected by CCL disease will be affected in both knees, though the ligaments often rupture at different times.

When a dog has CCL disease, the fibres of the ligament gradually stretch and tear. This, as well as the subsequent instability, triggers inflammation (swelling) in the joint, which causes pain and osteoarthritis. As a result, in early disease, dogs show signs of mild, intermittent, or progressive lameness, which tends to be worse following exercise. With acute complete rupture, there is sudden, severe lameness.



How does CBLO work?

In dogs, unlike people, the tibial plateau slopes downwards (towards the tail). During normal weight-bearing, the cranial cruciate ligament acts to prevent the shin bone (tibia) from slipping forwards relative to the thigh bone (femur). In dogs with cranial cruciate ligament disease, this movement is not resisted. This causes the knee joint to 'give way', resulting in pain and lameness.

CBLO surgery works to reduce the slope at the top of the tibia. This is done by making a curved cut in the tibia and rotating the created fragment. After surgery, when your dog is weight-bearing, the femur rests on the tibial plateau rather than slipping backwards and pushing the tibia forwards. This eliminates the instability in the knee and as a result, the lameness.



Post-Operative Care:

- Wound Care

Your dog will have a wound on the inside of their leg. Please check this area twice daily, there should not be any pain, swelling, redness or discharge from the wound. A buster collar should be used to prevent interference for the first 10-14 days after surgery.

- Exercise Plan

During the first 6 weeks, strict rest is vital to reduce the risk of complications. During this time, your dog should be confined to a crate or pen and should only be allowed out for short walks in the garden for toileting. These short toilet walks **MUST** be on the lead. Running, jumping and use of the stairs are **NOT** permitted.

Week Number	On-lead Exercise	Number of times daily	Off-Lead Exercise
1 to 6	For toileting only	As needed	None
6	5-10 minutes	Up to 3 times daily	None
7	10-15 minutes	Up to 3 times daily	None
8	15-20 minutes	Up to 3 times daily	None
9	20- 25 minutes	Up to 3 times daily	None
10	25-30 minutes	Up to 3 times daily	None
11	30 minutes or more	Up to 3 times daily	Start to re-introduce off-lead exercise.

Outcome

Most patients return to normal exercise following CBLO. A minority of patients, especially those with pre-existing arthritis, may require anti-inflammatory medication.

Risks and Complications

All surgeries have potential complications. Late meniscal injuries can occur at any point after surgery and occur in approximately 3% of patients. A similar rate of infection is seen post-operatively. More severe infections can result in the need to remove plates and screws. Major complications such as fractures and broken screws/plates rarely happen.

Cruciate Registry

We participate in the Canine Cruciate Registry Scheme and would greatly appreciate your feedback to continue to improve outcomes for our patients.



<https://caninecruciateregistry.org/>
images courtesy of the canine cruciate registry

www.SherborneVetReferrals.co.uk

