

Lateral Suture

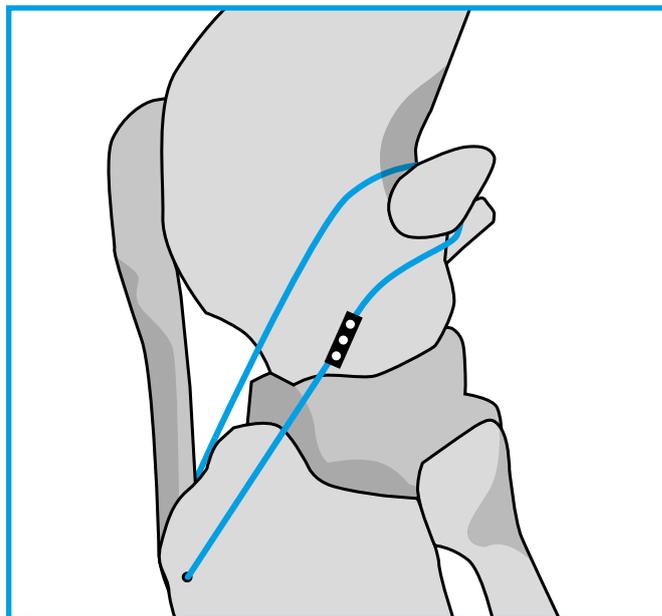
The Theory

The cranial cruciate ligament is one of the main stabilising structures of the stifle joint. It prevents forward movement of the tibia relative to the femur, stops internal rotation of the tibia and restricts hyperextension of the stifle. When your dog is weight bearing, the top of the tibia (the tibial plateau) is at an angle creating a “downhill” slope. When the cranial cruciate ligament is intact, it stops the femur “slipping” down this slope. When the ligament is torn, the joint becomes unstable during weight bearing as the femur slides down the slope, leading to pain, inflammation and arthritis.

The Surgery

The first part of the surgery involves examination of the internal joint structures and removal of the remnants of damaged ligament. The menisci (cartilages) are inspected, and any damaged tissue is removed.

A nylon implant is passed around the fabella (a small bone just behind the stifle) and through a bone tunnel in the tibia, after tensioning the implant the ends are secured with a metal crimp. Placement of this implant mimics the action of the cranial cruciate ligament

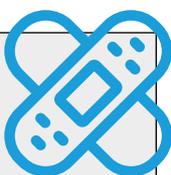


Post operative care

Lateral suture is a major procedure and it is vital that you follow these instructions for the best outcome.

Surgical Wound:

Your pet will have a wound on the outside of their leg. Please check this area twice daily, and report any swelling, redness or discharge from the wound.



Medication:

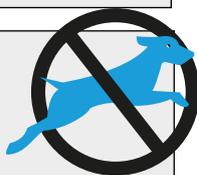
Your pet will be prescribed antibiotics and pain relief, it is important to follow instructions to avoid complications. Please report any changes in demeanour, vomiting or diarrhoea to your vet immediately.



Exercise restriction:

Strict rest for six weeks is essential for uncomplicated bone healing.

This means confinement to a cage or room with no furniture to jump on and off, especially when your dog is unsupervised. Stairs should be avoided and toileting should always be on a lead. Cats will need to be rested in a dog crate, large enough to contain their bed and litter tray, for 6 weeks post operatively.



Cold & Warm Therapy:

For 3 days post operatively – use an ice pack wrapped in a towel applied to the outside of the joint (not directly over the wound) for 5-10 mins 2-3 times daily.

Some swelling of the operated leg is to be expected and cold therapy and gentle massage from the toes up towards the stifle will reduce this.



Gentle Exercises:

Once your pet becomes more comfortable, start gentle passive flexion and extension exercises of the injured joint. Your clinic will show you how to do this. Start with 5 repetitions twice daily, and increase to 20 repetitions three times daily. Stop immediately if your pet resents this, or seems painful.

Hydrotherapy:

This can be started once the surgical wound has healed, under the guidance of your vet.



Post operative care (continued)

Physiotherapy:

Physiotherapy videos:

Videos of the physiotherapy exercises can also be seen on our website www.provetsurg.co.uk

2-4 weeks post-operatively

Elevated Sit-Stand

Place a small box or large book behind your pet's back legs and ask them to sit onto the item. Then ask them to rise back into a stand. Repeat 3-4 times twice daily. If the operated leg flops out to the side, try doing the exercise with the operated leg alongside a wall.

Weight Shifting

Stand your dog on a firm surface. Stand behind them and pop your arm under their belly to stop them sitting down (without holding them up). Using a treat, slowly lure them to turn their head round to their ribs on the right side, hold this position for a few seconds and then slowly lure them round to the ribs on the left side. Repeat 3 times each side twice daily.

In the same position, bring the treat between their front legs to lure their head down and between the front legs. This encourages them to shift their weight onto their back legs. Repeat 4 times twice daily.

4-6 weeks post-operatively

Sit to stand against a wall

Place your dog with the operated leg alongside a wall. Ask for a sit onto the floor and then a stand. Ensure the operated leg is not falling out to the side. Repeat 4 times twice daily.

Weight shifting on a wobbly surface

Progress from weight shifting using a treat on a firm surface to performing the exercise with you pet standing on a piece of foam/other soft surface.

Lateral Weaving

Place six items in a line with a space your dog's length in between them. Encourage your dog to SLOWLY weave in and out of the cones/items. Repeat 4 times twice daily.

Low Pole Work

Place poles or items close to the ground for your dog to step over. Make sure there is a dogs length between each item. SLOWLY walk your dog over the items to encourage lifting and placing of each leg. Ensure they do not jump or hop their back legs over. Repeat 4 times twice daily.



Introducing Exercise:

At 6 weeks post operatively as long as your pet is making good progress, you can start to increase their activity levels.

In the case of dogs you can start short lead walks of 5-10 minutes twice daily and increase walk length by 5 minutes weekly. Once they are comfortable on 30 minutes of lead walking your dog can have some off lead time introduced. In the case of cats, your vet will be able to advise you on gradually increasing your pet's freedom.

At all times your pet should make steady progress. If their mobility deteriorates or lameness returns please see your vet immediately.



Outcome

The lateral suture technique has been in use for many decades and has a relatively predictable outcome in small, light patients. 80-85% of dogs return to their pre injury level of exercise. One in 5 patients may require anti-inflammatory pain relief intermittently or ongoing in order to maintain their pre-injury lifestyle.

Complications

Complications can occur with any surgical procedure. Late meniscal injury (a tear in the cartilage inside the joint) is the most common complication, is the most common complication. This can occur months or sometimes years after surgery and requires a further operation to remove the damaged cartilage from the joint. Infection is seen in around 3% of cases and can require removal of implants. Very rarely we see fracture, or early implant failure post operatively. Cruciate ligament rupture is a degenerative disease in dogs and so rupture of the cruciate ligament in the other stifle is seen in up to 70% of patients within 12-18 months.

