TPLO & CWO-TPLO surgery

Cruciate ligament disease in dogs

Both procedures modify the biomechanics of the knee by changing the shape of the shin bone to improve knee stability, reduce pain and help your dog move more comfortably.

About the procedure

Why is my dog limping?

The cranial cruciate ligament helps control movement of the knee. It often weakens gradually, rather than tearing in a single accident. When it is damaged, the knee becomes painful and unstable. Your dog may limp, struggle to rise or avoid using the leg. A cushioning pad inside the knee, called the meniscus, may also be injured. Arthritis commonly develops.

How will my vet confirm the problem?

Your surgeon checks the knee for swelling, discomfort and excessive movement. Sedation may help with the examination. X-rays show bone and joint changes and help the surgeon measure the shape of the shin bone (tibia) before surgery.

How does TPLO work?

TPLO stands for tibial plateau levelling osteotomy. The upper surface of the tibia is naturally sloped. With a damaged ligament, the shin bone tends to slide forwards during weight bearing. In standard TPLO, the surgeon makes a curved bone cut, rotates the upper section to make the slope flatter, and holds it in place with a plate and screws.

What is CWO-TPLO?

CWO (cranial closing wedge ostectomy, also called CCWO) is a different way to achieve a flatter slope. The surgeon removes a wedge of bone from the front of the upper tibia, brings the cut surfaces together and secures the bone with a plate and screws. This is an alternative to the radial TPLO technique. Your surgeon chooses the approach using X-ray measurements, your dog's size and the shape of the tibia.

What happens during surgery?

Under general anaesthesia, the surgeon examines the knee and treats damaged meniscal tissue if needed. The planned bone cut is made and stabilised. X-rays check the new bone position and the implants. Pain relief is provided, and your dog goes home when the team considers it safe.

Are there alternatives, and what can I expect?

Other surgical methods or non-surgical care with weight management, pain relief and rehabilitation may be suitable for some dogs. Most dogs improve after either operation, but neither replaces the ligament or cures arthritis. Some stiffness or pain may persist. Disease can also develop in the other knee.

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Recovery, risks and home care

Recovery and home care

Looking after your dog at home

Provide a quiet space with good grip underfoot. Cage rest is strongly recommended and will help avoid many unnecessary complications. Keep toilet trips on a short lead. Prevent running, jumping, stairs and rough play until your vet approves. Give prescribed medicines only, inspect the wound daily, keep it dry and prevent licking with a protective collar or other device recommended by your vet.

Checks and return to exercise

A wound check is usually arranged at around 10–14 days. X-rays are often taken at 6–8 weeks to check the bone healing; some dogs need further imaging. Healing may take 8–12 weeks. Do not increase activity simply because your dog seems comfortable: follow the agreed walking and rehabilitation plan until your vet confirms it is safe. Full recovery may take several months.

When to contact your vet

Seek advice promptly for new or worsening limping, increasing swelling, wound discharge, fever, reduced appetite or a fall. Report vomiting or diarrhoea while taking medicines.

Discussing risks and complications

Both techniques involve cutting and fixing bone under general anaesthesia. Complications can arise despite careful surgery, safe anaesthesia and home care. Your vet will discuss which risks are most relevant to your dog.

As with any surgical procedure, complications can occur. Your surgeon will discuss the possible complications, individual risks and expected outcome for your pet during the pre-operative consultation.

Important information

Follow your individual discharge instructions. This sheet supports your discussion with your vet; it is not a consent form. Contact your own practice or its out-of-hours service for urgent care in case of emergency.