

Description: The anterior cruciate ligament (cranial cruciate ligament) is a knee ligament that may be torn or ruptured during sudden stopping or twisting movements. The resulting ligament instability causes lameness, pain, and ultimately leads to degenerative arthritis in the knee. The tibial plateau leveling osteotomy (TPLO) procedure stabilizes the knee using biomechanical principles that alter the tibial plateau slope. Rather than trying to replace the ligament, the TPLO procedure alters the angle of the knee in a way that allows that patient to function comfortably without a ligament.

Indications: There are different types of surgical procedures used to repair ruptured anterior cruciate ligament injuries. Most orthopedic surgeons prefer the tibial plateau leveling osteotomy procedure for large breed or active dogs. Regardless of the size of the patient, the conformation (shape) of the tibia should also be taken into account when choosing a stabilization procedure. Tibial plateau leveling osteotomy is indicated in any patient with a high tibial slope.

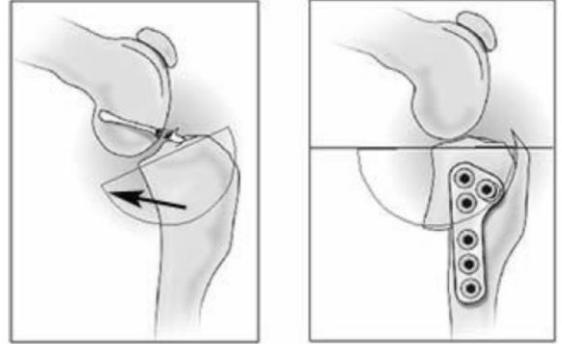


Figure 1: Voss, J. Treatment Options for Cranial Cruciate Ligament Injury/Disease of the Dog Knee (p. 2). Colorado State University. Retrieved from <http://csu-cvms.colostate.edu/Documents/orthopaedics-cruciate-ligament.pdf>.

Postoperative Care

Medication: Pain medication is generally only required for the first 10 to 14 days following surgery. Give pain medication only as prescribed and do not give human drugs without first consulting with a veterinarian.

Exercise: Strict confinement should be enforced until follow-up radiographs reveal bony union at the osteotomy site. Exercise should consist of short walks outdoors only for elimination purposes on a leash. Otherwise your pet should be kept in a pen or small room at all times located away from other pets and without furniture that he or she could jump upon. After radiographs reveal adequate healing, swimming and/or gradually increasing the leash walk distance is recommended over the next 6 weeks before normal activity is resumed.

Incision Care: In most cases, your pet will not go home with a bandage, so it is important to keep an eye on the incision site. Some mild redness, swelling and bruising is expected, and should go away within a week or so of surgery. Evaluate the incision daily for discharge, excessive swelling, opening of the incision or increased redness, as these signs can be an indication that additional treatments are required. It is very important to use an e-collar to prevent your pet from licking, pulling, or scratching at the incision.

Recommended follow-up: Please schedule an appointment for suture removal 7 to 10 days after surgery. In addition, please contact us immediately if

1. Any unusual swelling is noted
2. Discharge of the incision site exists
3. Any increase in lameness is noted after pet was starting to improve
4. Or limping is noticed on any of the other legs

A follow-up radiographic examination is advised 6 weeks after surgery to assess bone healing. Further follow-up may be advised depending on the rate of bone healing.

Prognosis: The Prognosis for recovery to normal or near-normal function in the limb is generally excellent following a TPLO. Pre-existing arthritis may limit the full recovery of some patients, but most can regain an active, pain-free life. We have had numerous patients return to work as hunters, field trial competitors, police dogs, show dogs, and other athletic endeavors following the TPLO procedure. Potential complications following TPLO include implant failure, if exercise restriction is not enforced, and infection. The plate used to stabilize the tibia is usually left in place permanently unless a chronic infection develops. Once the bone has healed, the plate can be safely and simply removed, with no loss of stabilization of the knee, if needed to help treat infection.

Your pet's recovery and well-being are our primary concerns, so do not hesitate to call and speak with a veterinary technician or surgeon if there are any questions regarding your pet's recovery.