

# TPL-WHOOA?!?

## Tibial Plateau Leveling Osteotomy

### CCL

The CCL (cranial cruciate ligament) in dogs and cats is equivalent to the ACL in the human knee. CCL tears are one of the most common orthopedic injuries seen in veterinary medicine.

### How?

People will usually incur traumatic or sports-related injuries. Dogs are different- imagine the CCL as a thick rope that gradually frays over time until it finally gives out. Conformation, breed, weight, activity levels, and other extraneous factors can effect your dog's risk.

### Options

CCL injuries in dogs and cats are almost always require surgery. There are multiple different options available, but TPLO is widely considered to be the gold standard to help maximize long term function and limit future arthritis. Our doctors are always happy to discuss various methods of repair with you.

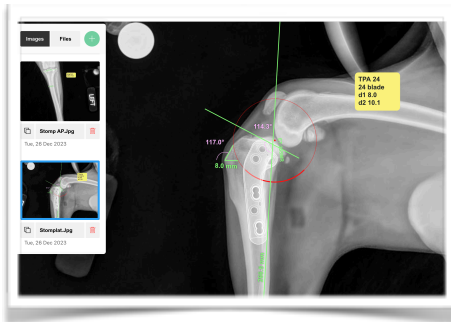


## Cranial Cruciate Ligament

The CCL runs through the middle of the knee joint and helps anchor the femur [thigh bone] and tibia [shin bone] relative to each other. Once injured, there will be excessive movement (we call this drawer or thrust) between the two bones. This instability results in pain, decreased function, damage to other structures, and arthritis as time goes on. Dogs with one torn ligament may also be more likely to injure the opposite knee due to overload and compensation.

### *Surgery is best*

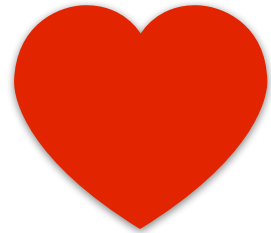
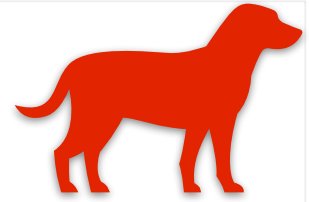
Surgery for your pet is always worrisome, we know, and recovery times can range from 8-12 weeks in most cases. However, without surgery, the degenerative changes within the joint will continue to get worse and worse and worse. Even if your pet is not crying or vocalizing and although they may start to use the leg more with time, they are still in pain. Surgery, specifically TPLO, is almost always the best way to achieve a better long-term outcome.



## The mechanics

TPLO involves making a calculated cut in the bone (a small fracture) to change the angles inside the knee joint. The new angles will eliminate the instability, the pain, and help limit arthritic changes long-term.

- X-rays provide us with very specific measurements on exactly where to cut the bone and how far to rotate it.
- Once the angles are correct, we place a plate and screws along the inside of the leg to hold the bone still as it heals.
- Bone healing usually takes 8-12 weeks. During this time, exercise restriction, E-collars (the dreaded cone!), proper bandage care, and prescribed rehabilitation are all important to ensuring a good outcome.
- We retake x-rays on your pet's knee after 8 weeks to evaluate bone healing.
- After 8 weeks, your dog can usually start resuming their normal activities. The plate and screws are typically not removed in most cases.



Taking care of your pet after TPLO surgery can seem like a daunting task, but we are always available to answer questions and to help you. Dogs with TPLO surgery will usually start partial weight bearing on the injured leg in a matter of days—sometimes keeping them quiet can be the more difficult job! We include structured rehabilitation sessions every two weeks during your pet's recovery. Thankfully, most of our TPLO patients return to life and work doing better than ever—we've had dogs return to hiking, frisbee, agility competition, and herding after recovering from surgery! Even your average pet should be more comfortable and healthier after recovery. Implementing good conditioning programs, proper nutrition, weight control, and use of targeted supplements can all help as well. Although cutting the bone seems extreme, bone will actually heal just as strong as it was originally in just 8-12 weeks. Other methods of repair that rely on soft tissues and scar tissue formation are less likely to provide such a good functional outcome and often result in arthritic changes later on in life. We love seeing our TPLO patients "graduate" and get back to living the best life possible! Please reach out if you have more questions!!