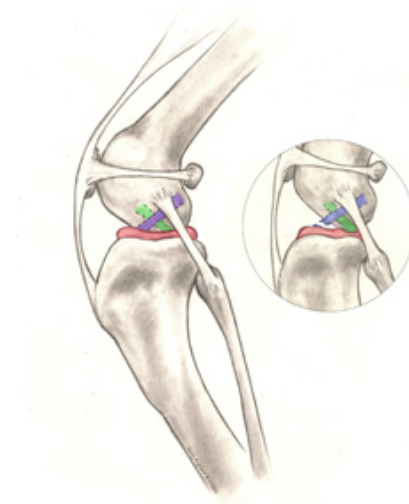


## ***What is a cranial cruciate ligament?***

The cranial cruciate ligament (CCL) is one of the stabilizers of the knee. The CCL is the same as the anterior cruciate ligament (ACL) in humans. The CCL originates on the caudal aspect of the femur and inserts on the cranial aspect of the tibia. In the picture below, the CCL is purple.



## **What happens when the CCL is ruptured**

The job of the CCL is to keep the femur (thighbone) centered over the tibia (shin bone). In a dog, the tibial plateau is sloped to the back of the knee. When the CCL is torn, the tibia will slide forward in relation to the femur, causing the knee to be unstable. The CCL can rupture completely or partially. With a complete rupture the tibia slides forward in relation to the femur and often the dog will not walk on the leg because of the instability. The sliding movement is called the cranial drawer sign.

## **What are the signs of a CCL injury?**

- difficulty rising from a sit
- lameness (limping) of variable severity
- muscle atrophy (decreased muscle mass in the affected leg)
- unwillingness to play and decreased activity level

## **What is a TPLO?**

TPLO stands for tibial plateau leveling osteotomy and is used in dogs with a ccl rupture. The tibial plateau is the top of the tibia. A cut (osteotomy) is performed in the proximal portion of the tibia to isolate the tibial plateau. The plateau is rotated (leveled off). A plate is placed to hold the bone in the new position while it heals over the next 10

weeks. The tplo changes the biomechanics of the knee so the dog does not need the CCL anymore.

***How long is post operative recovery?***

The bone typically heals in 8 weeks. Most dogs need 12 weeks of confinement to allow the soft tissues and the bone to heal. Controlled postoperative activity allows for two objectives to be met - one is the soft tissues have time to reinforce themselves and to get used to their new tissue loads. The second objective is for the bone to heal. Once recovered, 90 to 95% patients return to an active lifestyle.