

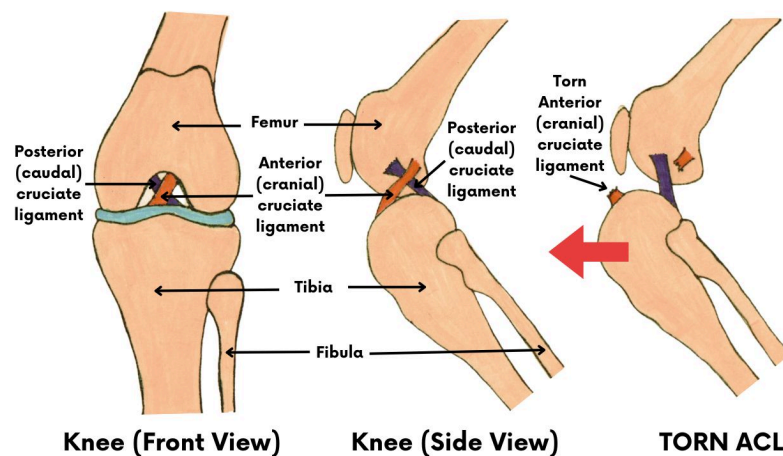


Cruciate Ligament Tear in Dogs

The cruciate ligaments are two bands of fibrous tissue located within each knee (stifle) joint. They join the femur and tibia together (the bones above and below the knee joint), so the knee works as a stable, hinged joint. One ligament runs from the inside to the outside of the knee joint and the other from the outside to the inside, crossing over each other in the middle. In dogs and cats, the ligaments are called the cranial and caudal cruciate ligaments. In dogs, the most common knee injury is a rupture or tear of the cranial cruciate ligament.

Humans have a similar anatomical structure to the dog's knee, but the ligaments are called the anterior and posterior cruciate ligaments. Anterior cruciate ligament (ACL) rupture is a common knee injury in athletes.

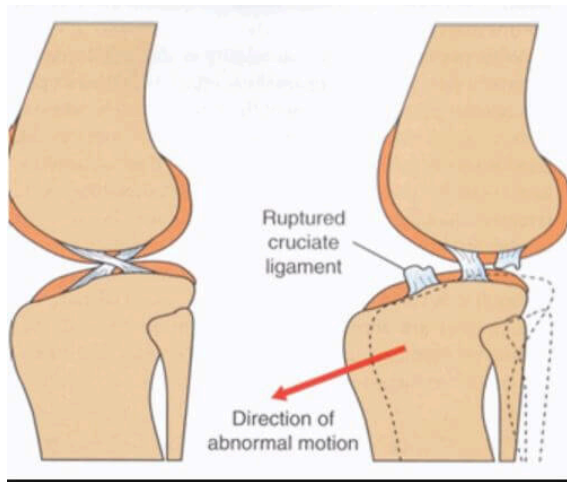
The two most common causes of cranial cruciate rupture are trauma and degeneration of the ligaments within the joint. Acute or traumatic cruciate rupture is caused by a twisting injury to the knee joint. This twisting occurs most



often when the dog is running and suddenly changes direction, placing most of the body weight on the knee joint, while excessive rotational and shearing forces are placed on the cruciate ligaments. This injury usually affects the anterior or cranial (front) ligament. A cruciate ligament rupture is usually extremely painful and the knee joint becomes unstable, resulting in lameness.

A more chronic form of cruciate damage occurs due to progressive weakening of the ligaments due to repeated trauma or arthritic disease. Initially, the ligament becomes stretched or partially torn and lameness may be only slight and intermittent. With continued use of the joint, the condition gradually gets worse until a complete rupture occurs. Obese dogs appear to be predisposed to developing a cruciate rupture. In these dogs, the injury may occur with minor trauma to the knee, such as stumbling over a rock while walking. Dogs with other knee problems, such as a luxating patella, may also be predisposed to rupturing their cruciate ligaments. Dogs who rupture one

cranial ligament are predisposed to rupturing the cranial cruciate ligament in the other knee.



During the lameness examination, your veterinarian will try to demonstrate a particular movement, called a cranial or anterior drawer sign. This abnormal forward movement of the lower leg bone (tibia) in front of the thigh bone (femur) indicates laxity or instability in the knee joint. It may be necessary to administer a sedative to relax the dog enough that the veterinarian can perform this test. Other diagnostic tests such as X-rays (radiographs) may also be necessary.

Dogs weighing less than 33 lb may heal without surgery, provided they have severe exercise restriction, such as strict cage rest for six weeks. Dogs over 33 lb usually require surgery to stabilize the knee. Unfortunately, most dogs eventually require surgery to correct this painful injury. Consult your veterinarian to determine the best course of treatment for your dog.

*****EOAH now offers TPLO repairs to those that qualify!*****

This surgery changes the angle and relationship between the thigh bone (femur) and the shin bone (tibia). The overall intent of the surgery is to reduce the amount that the tibia shifts forward during a stride. This is accomplished by making a semicircular cut through the top of the tibia, rotating the top of the tibia, and using a bone plate to allow the tibia to heal.



This realignment of the surfaces within the knee (stifle) helps to provide stability during a stride and helps to reduce future joint inflammation and osteoarthritis. By carefully adjusting the angle or slope of the top of the tibia, surgeons can create a more normal configuration of the knee joint and reduce mechanical stress.

Recovery post-op can last 12 weeks, slowly increasing activity level until it returns to normal. Board-certified surgeon, Dr. Hobday, VMD will give you a detailed discharge sheet with a recovery plan, including an exercise plan and when repeat x-rays should be

done to ensure proper healing. Recovery is a long road, but in the end your pet will be much more comfortable!