



Cruciate Ligament Disease

The cruciate ligaments are found in the stifle (knee joint) and are so called as they cross over in the joint.

The structure of the knee is like a rocker on a flat plate. The cruciate ligaments are 2 fibrous bands which connect the femur and the tibia and allow the stifle to flex and bend but most importantly stop backward and forwards movement of the tibia.

The Cranial (anterior) cruciate ligament prevents the tibia from moving forward of the femur when the dog bears weight on the leg and also prevents hyperextension of the knee and is the most common ligament that is diseased or ruptured.

Sudden cruciate rupture is a common knee injury of athletes and can occur in dogs. We are able to easily diagnose this condition by exhibiting the presence of a drawer sign in the knee. These dogs are usually acutely lame and most will carry their leg instantly. Amazingly this is not normally painful but they will hold the leg up due to the instability which occurs when they place the leg down. Unfortunately we more commonly see a complex of issues that is known as cruciate or stifle disease. This chronic form occurs due to continual weakening or partial tearing of some of the filaments that make up this multifilament ligament, like the breaking of strands in a rope. These dogs will often show signs of intermittent lameness which are responsive to anti-inflammatories but then the

lameness will reoccur. It can be a very frustrating condition for pet, owner and vet.

As this condition is generally ongoing there is continual inflammation in the joint which leads to arthritis developing in the knee and eventually the ligament will rupture, and this can happen with normal activity. The majority of cruciate ruptures happen in this way and unfortunately most joints are diseased with arthritis before they are diagnosed. This degenerative process is irreversible.

In up to 50% of cases there can also be damage to the small moon shaped pieces of cartilage called menisci that sit between the ends of the bones and act as a cushion. The rapid movement of the tibia in a forward direction when the ligament tears causes a tear in the menisci (commonly the inner one) which produces pain for the dog whenever they bear weight on the leg.

It is for this reason that we always inspect the joint when surgery is performed.

Unfortunately because of the conformation of that dogs knee and the likelihood that the chronic disease process is occurring in both knees, there is a 60% chance that the dog will rupture the cruciate in the other leg within a year.

