



CRUCIATE LIGAMENT RUPTURE

What is a cruciate ligament and how do dogs rupture it?

Just as football players frequently suffer knee injuries, the dog may also be prone to knee injuries since the knee joint is one of the weakest in the body. The knee joint is relatively unstable because there are no interlocking bones in the joint. Instead, the two main bones, the femur and tibia, are joined with several ligaments. When severe twisting of the joint occurs, the most common injury is a rupture of the anterior cruciate ligament which is one of two ligaments which actually cross over within the joint and ensure that it is stable and works in one plane. When it is torn, instability occurs that allows the bones to move in an abnormal fashion in relation to each other. It is not possible to bear weight on the leg without it becoming unstable. Note cruciate ligaments are only apparent in the hind legs of dogs.

How is it diagnosed?

Most breeds of dogs can rupture their cruciate ligaments and quite often if one leg has a cruciate rupture the other leg will subsequently rupture. Owners often describe a sudden non-weight bearing on the hindleg, usually following off-lead exercise and it is often hard to determine the source of pain.

One of the most reliable means of diagnosing this injury is for the vet to move the femur and tibia in a certain way to demonstrate the instability. This movement is called a "drawer sign". It can sometimes be demonstrated with the dog conscious. However, if there is severe pain, strong leg muscles, obesity or an uncooperative patient, it may be necessary to use a sedative or a light anaesthetic in order that the veterinary surgeon may examine the joint thoroughly.

How is it treated?

Correction of this problem requires surgery. There are multiple surgical options available. Your vet will discuss the best option for you according to the size of the dog, costs, vet's preference and skills. Generally surgery costs upwards of \$1500.

I have heard of torn cartilage. Does this also occur?

Occasionally the injury that causes a ruptured anterior cruciate ligament will also result in tearing of one or both of the menisci or "cartilages". At the time of surgery, these are examined and treated, if necessary.

What happens if surgery is not performed?

Occasionally, the dog that has a ruptured cruciate ligament will become sound (will no longer limp) even if surgery is not performed. However in all cases where surgery is not performed, arthritis will occur and result in permanent lameness. This is usually managed with anti-inflammatories and general arthritis management.

My dog is overweight. Does that relate to this injury?

Obesity is a strong contributing factor in cruciate rupture. The ligament may become weakened due to carrying too much weight which causes it to tear easily. Obesity will make the recovery time much longer, and it will make the other knee very susceptible to cruciate rupture. If your dog is overweight it is worth consulting your veterinary surgeon to formulate a weight loss plan.

Written by P Honson 2017