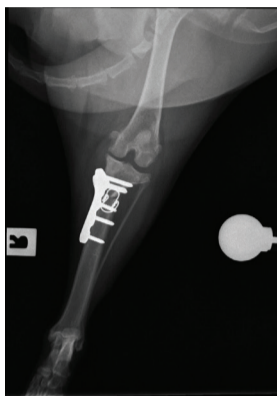




McMASTER & HEAP
VETERINARY PRACTICE

A COMMON ORTHOPEDIC DISEASE (ACL rupture)

Heard of "ACL" disease in people, well it's just as commonly diagnosed in dogs. Every week we have a dog admitted for "Cranial Cruciate Ligament (CrCL)" surgery and we see lots of lame dogs that have partially torn their ACL ligament, rendering them lame. I was an enthusiastic netball player in my youth and at 16 years old I tore my Right ACL. Back in the "olden days" it was an uncommon injury and I was undiagnosed for 18 months, spent 18 months with a physiotherapist which didn't help at all and basically I was constantly limping and had to give up all sport, even horse-riding which I loved, as my knee couldn't withstand the impact and weight bearing load.



When healthy, the dog's knee joint acts as a simple hinge like ours, swinging backwards and forwards. The centre of the hinge is inside the joint. The cranial and caudal cruciate ligaments, form a cross inside the joint and maintain contact between the femur (thigh bone) and tibia (shin bone). Lots of scientific research has been undertaken to ascertain WHY the ligament fails. It appears to be a complex interaction of genetics, bodyweight, breed, exercise patterns, trauma – there is no one answer unfortunately.

We sometimes see dogs that acutely tear completely through their ACL ligament due to trauma (chasing a ball, vigorous play, jumping), causing sudden non weight bearing lameness. More commonly the ligament disease is slowly degenerative and the CrCL will fail over weeks to years before rupturing. These patients often already have moderate amounts of stifle arthritis. When this happens, the knee swells up causing pain, resulting in lameness.

Animals are lucky as they get diagnosed immediately and surgery can be planned within the week, often happening on the same day. In a relaxed dog you can palpate the stifle and get obvious movement (this is due to the tibia riding forward and the femur sliding backwards). Some patients need to be sedated to feel this "cranial draw" as the joint is too sore and swollen. We commonly perform radiography to check for arthritis, any other joint pathology and for surgical planning.

All dogs, regardless of size and breed, will do better with surgical stabilisation of their joint than without. Dogs need 4 working legs to have an active, pain-free existence. The aim of all surgical procedures is to eliminate the "cranial tibial subluxation" to prevent pain and achieve stabilisation.

Surgical procedures offered fall into 2 broad categories – surgeries that change the geometry of the stifle so the ligament is not relied on (TPLO procedure) AND surgeries that attempt to replace the ligament with a synthetic replacement. At McMaster & Heap we offer both surgeries.

Your veterinarian will discuss both options.

TPLO (Tibial Plateau Levelling) is gold standard and the preferred option for the majority of dogs and performed by our referral orthopaedic surgeons. It comes with a higher price tag due to complexity and skill level required, time under anaesthetic and because there are implants in your dog's knee. Outcomes are predicted to be 90-95% of normal limb function and rapid return to limb use. It is strongly advised for large, sporting or working dogs who get poorer outcomes with other procedures.

Ligament replacement surgeries to stabilise the joint, reduce pain and improve joint function are cost effective for owners on a tight budget, preferred on the geriatric patient and offer good outcomes with less time rehabilitating.



There are other procedures available (TTA, TTO, MMP, MMT) and these can be discussed with your surgeon.

Both procedures are day surgeries and require general anaesthesia, as well as nerve blocks to numb the knee for surgery. In theatre the knee joint is inspected and torn ligament or meniscus removed. This is important to prevent ongoing pain. Regardless of the surgical technique, all patients must carry out a 6-8 week confinement period to ensure surgical outcomes are maximised. There will be scheduled follow up appointments and clear instructions on what to do and what NOT to do. Physiotherapy and Hydrotherapy is recommended post-surgery for all patients to help with return to full function.

This is a common disease (especially in the dog) that should be diagnosed quickly and easily, allowing corrective surgery to be performed to restore limb function and give your special mate their quality of life back. Any questions on this complex disease, please direct to Dr Michele McMaster.

OPEN 7 DAYS

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