

## Rehabilitation Example For Grade One Cranial Cruciate Ligament Injuries

Characteristics of a Grade One CCL injury (Edge-Hughes 05):

- Mild swelling detectable at the parapatellar tendon
- Mild discomfort on stress testing (unanaesthetized)
- Partial weight bearing use of limb

The following treatment protocol can be used in dogs with partial cruciate tears or when surgery is not an option or has been declined (Edge-Hughes 05).

- Keep the dog on leash for 2 – 3 months without exception
- Modalities that may encourage circulation to the cruciate ligament (ie PEMF, LASER or ULTRASOUND) on a regular basis and/or acupuncture.
- Joint proprioception techniques such as joint compressions
- Joint gliding technique: to mimic the cranial drawer test gently can put low loads of normal stress on the cruciate and stimulate normal healing alignment (one hand on the front of the knee and the other hand behind the upper part of the tibia – gently push forwards with the hand on the tibia). This glide should not cause pain. Do 5 – 10 glides, rest and repeat another 2 or 3 sets, once or twice a day.
- Strengthening of the adjacent musculature: Up hill walking (steep going up and gradual coming down), nearer to the 2 – 3 month mark add some ‘destination jumping’ (ie onto a bed or couch or over a small jump) and/or tug of war exercises if the dog is safe in doing so.
- Balancing / Co-ordination:
  - 3-leg standing or diagonal leg standing (hold the position for 15 seconds or more)
  - Walking on different terrain (ie to cause high stepping or somewhere with uneven footing), Rocker boards, mini trampolines, obstacle course, cushions off the couch etc. – *wait for a few more weeks before engaging in these.*
- Supplementation: Glucosamine HCl and MSM have been found to be useful joint protection and soft tissue healing respectively. I find a short term (3 week) Triple Dose of Glucosamine HCl / MSM is helpful, and then switch to a double dose for the long term or indefinitely. A regular dose of Glucosamine and/or MSM is 500mg per 25 lbs of dog. Omegas 300mg/10lbs dog. (Vitamin E 400 IU).
- Throwing the ball or playing Frisbee again will be dependent upon the healing of the injury.

Please feel free to call if you have any questions or concerns.