



## Physiotherapy Newsletter

### Canine orthopaedics – CCL repair rehabilitation

Physiotherapy from immediately post CCL repair is effective <sup>(1)</sup>. Vets worry that Physio rehab is just about exercising or 'manipulating' joints of the dog and since the dog is on strict rest post op, they think that physio is not applicable – but it is. Best started within 7 to 10 days.

This quote epitomises physio rehab: "*Knowledge of the stages of tissue healing and of the strength of tissues is critical to avoid placing too much stress on the surgical site, yet some challenge to tissues must be provided to optimize the return to function.*" (Davidson et al 2005).

Physiotherapy is controlled challenges by a qualified professional. The Chartered Physiotherapist treats the dog regularly (once or twice a week) and this regular input helps the owner to see progress and follow the vet's instructions on exercise restrictions. Too often owners contribute to failure because 'the dog looked alright', so they relax control much too early.

Owners appreciate physio involvement, it gives them confidence early on that their dog will recover and it has them involved in their dog's recovery. Regular physiotherapy helps the dogs relax and for both owners and dogs to cope. Physio is more successful as the first resort not the last resort – it is easier to prevent lack of use and tissue restrictions than to try to reverse them.

Research <sup>(1,2)</sup> by vets and physiotherapists has shown that early formalised physiotherapy intervention, as part of the postoperative management, can improve limb function, prevent muscle atrophy, build muscle mass and strength, and increase stifle joint range of movement.

So please compliment your painstaking surgery - refer to a Chartered Veterinary Physiotherapist immediately post op. We work as a team for the benefit of the dog. See Vet pages on website for more info on physio post ccl repair.

\*\* see website for scientific references

### Canine orthopaedics – CCL repair rehabilitation -

#### So what does the physio do then?

Each case is unique and receives an assessment before any treatment is applied. Physiotherapy is not prescriptive; we use information from assessment, vets and owners to clinically reason with our knowledge on tissue healing, surgical procedures and biomechanics to devise a bespoke rehab program for that dog.

The aims of physio rehab post CCL repair are:

- a) reduce pain
- b) promote healing
- c) promote controlled functional use of the limb
- d) prevent compensatory stresses on the musculoskeletal system
- e) provide advice and reassurance to the owner.

The assessment includes – knowledge of the surgical procedure, veterinary surgeon's post-op instructions; dog and owners lifestyle and home environment, pain assessment, compensatory muscle tension, range of movement of limbs, proprioception, current vs expected use of the limb, co-morbidities.

Treatments in the days following surgery may include: cold therapy, gentle range of movement exercises, controlled standing exercises to encourage expected weight bearing status of the limb, proprioceptive exercises and a detailed home management program. All of this is highly controlled and for the above aims.

Mid to latter stages of physio include pulsed magnetic therapy, transition exercises, progression in proprioception exercises; gradual exercise increase on lead incorporating changes in terrain and controlled speed as rehab progresses. All the time checking the dog is not compensating and overloading other structures.

Late stage rehabilitation can take the dog all the way back to sport with building up sport specific related controlled exercises.