

Veterinary diagnosis

A veterinarian diagnosed a young dog with a partial rupture of the cranial cruciate ligament and prescribed anti-inflammatory and pain medication. The owner wanted to manage the condition conservatively and the vet referred them for myofunctional therapy.

Myofunctional assessment

The myofunctional assessment was performed approximately four weeks from the date of injury. The dog had completed the anti-inflammatory and pain medication several days prior to the assessment date. The referring veterinarian had cleared the dog to commence treatment and mild exercise.

Observation – Stationary

The following observations were made while the dog was in a stationary standing position:

- Pelvis asymmetrical – higher on the side of the injured limb.
- Femoral biceps on injured limb atrophied, particularly at the origin aspect.
- Not weight bearing on injured hind limb.
- Weight bearing forward onto forelimbs.
- Head carriage slightly forward and low.

Observation – Movement

The following observations were made with the dog in a walk from a cranial / caudal view.

- Not weight bearing on injured leg.
- Placement of non-injured hind limb toward the midline.



Figure 1 Canine stifle joint

The following observations were made while observing the dog laterally in a walk:

- Weight bearing forward onto forelimbs.
- Head carriage slightly forward.
- Reluctance to turn to the side of the injured limb.

Assessment of the dog's movement over obstacles was not performed as the dog was anxious about approaching the obstacles.

Palpation

A physical examination of the dog found no contraindications to treatment.

The following observations were made from the physical examination:

- Muscular tension in right and left brachial triceps, deltoid, trapezius and origin aspect of cleidocervical more so on the side of the injured hind limb.
- Atrophy of the femoral biceps of the injured limb.
- Muscle spasms and irritability along both the right and left thoracic and lumbar vertebrae – origin of trapezius, latissimus dorsi, tensor muscle of the fascia lata and gluteals.
- On the uninjured hind limb, muscle knot and irritability in the insertion of the gracilis. Muscle tension in the femoral biceps and pectineal.
- On the injured hind limb, muscle knot and irritability in origin aspect of the semitendinous.
- Dog guarding injured stifle.

Objectives of treatment programme

The objectives of the treatment programme were as follows:

- Address muscle tension and irritability in compensatory muscles in the uninjured limb, along the vertebral column, neck and forelimbs to prevent any longer term affects on gait.
- Maintain muscular health of uninjured hind limb particularly supporting the stifle joint to reduce risk of injury to cruciate ligaments.
- Address muscle atrophy in hind limb and maintain mobility.
- Increase proprioception in injured leg to encourage weight bearing and mobility.

Treatment programme

The treatment programme comprised the following elements:

- Myofunctional therapy treatments including:
 - Massage to address muscular tension and maintain circulation in the muscles particularly in the injured limb,
 - Passive and active joint mobilisations and exercises to increase proprioception and maintain mobility.
- Hydrotherapy – water walking to increase proprioception and build muscle strength.
- Diet and lifestyle
 - Modified diet to aid muscle healing and address weight gain due to limited exercise.
 - Addressed floor surfaces in the house to aid recovery and prevent further injury.
 - Modified yard design to prevent re-injury (or injury to other limb).
 - Modified exercise regime to aid healing and prevent re-injury.

For more information about how Full Stride may assist you and your dog please email me at jiconlon@fullstride.com.au