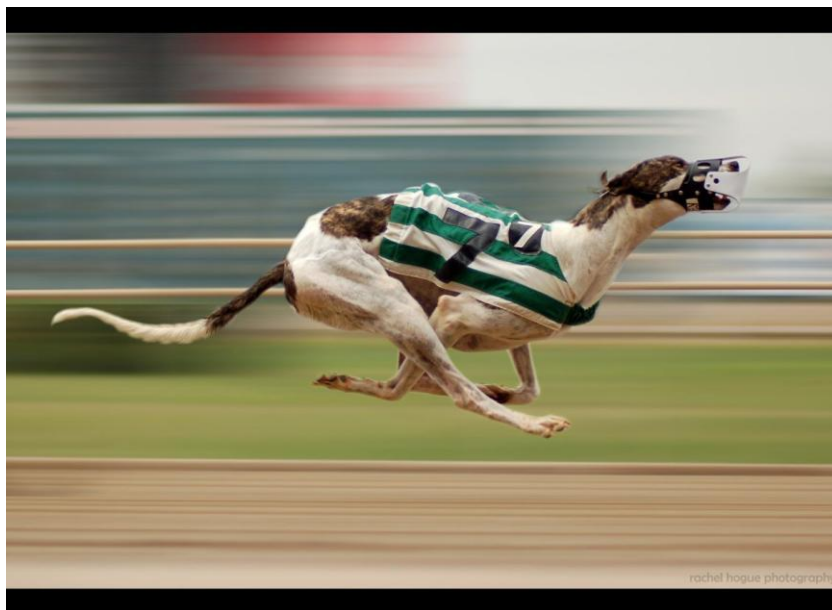


# Greyhound Specific Injuries

**By Helen Clarke, 3 Counties Canine Massage Therapy**

About 80 years ago the first experiments in training greyhounds to chase an artificial hare, developed into the spectator sport of greyhound racing, with 5 or 6 greyhounds pursuing a mechanically driven hare anti-clockwise around a track in front of a crowd of spectators.

The greyhound commences his/her career at 15 months of age and after running introductory trials around a track, will commence regular racing. The speed achieved is between 35–38mph and races are run over all distances from 200 to 1000 metres, with there being a similar variation in ability to sprint or stay long distances as in human or equine athletes.



There are some important anatomical and physiological points to consider:

1. Two thirds of the body is carried on the front limbs, one third on the hind limbs. This forward gravity effect aids acceleration.
2. Muscles on the hind limb are larger and thus produce more power and strength.
3. The forelimbs have 80% steering function, 20% speed, with an important weight bearing and shock absorbing function.
4. Most limb extension is immediately prior to weight bearing, most flexion when the limb is in the air. Therefore the extensor muscles are stronger than flexor.
5. In addition to flexors and extensors, abductors and adductors contribute to limb movement, a complex interaction of a number of different muscles.

### **Factors influencing injury:**

1. Speed into the bend. Some, especially young greyhounds, are so fast during the 80–100metre race to the first bend and are either forced to check or collide with other greyhounds.
2. Structure of the track. The average track has two long straights of 80–100 metres and two bends, making a total circuit of 380–500 metres.
3. The track surface. Is the going soft, good, hard?
4. Bitches can be affected by hormonal factors. During the 11 weeks after a bitch has been in season, progesterone and prolactin rise in the blood stream even if no mating has occurred. This can affect collagen in tendons and ligaments. There is therefore a marked incidence of lameness in bitches returning after their traditional 11 weeks post seasonal rest during which they do not race. However, many bitches will have their seasons suppressed with the equivalent of the contraceptive pill.

5. Training. As with all other athletes, the maintenance of 'form' is associated with the knowledge of the individual's dietary requirements and need for exercise.

### **Common Injuries:**

**Toes and feet.** Torn collateral ligaments; sub luxations (dislocation) and fractures of metacarpals/metatarsals; injured superficial digital flexor tendons.

**The carpal (wrist) joint.** Injury to the wrist is the most common cause of early retirement. The most common fracture is that of the right accessory carpal bone. Arthritis is a common sequel to wrist injuries.

**The hock.** The hock is made up of 7 bones and fracture of the central tarsal (usually in the right hock) is often accompanied by fracture of one or more of the other bones.

### **Muscle injuries:**

**Shoulder and elbow:** **Brachiocephalicus**, **Supraspinatus** (extends shoulder), **Infraspinatus**, **Deltoid** (flexes and abducts the shoulder), **Triceps** (extends elbow), **Biceps brachii** (flexes elbow).

**Hind limb:** **Biceps femoris** (extends the hip), **Semitendinosus** (extends the hip), **Middle Gluteal** (extends the hip and abducts the hip), **Pectineus** (adducts the hip), **Gracilis** (adducts the hip and extends the hock – the '0 to 60 mph muscle'), **Tensor Facia Lata** (flexes and stabilizes the hip and extends the stifle), **Quadriceps femoris** (extends the stifle), **Gastrocnemius** (extends the tarsus and flexes the stifle).

**Fascia injuries:** Fascia can 'pop'. When a dog is static, fascia takes on the shape of that position; when there is a sudden explosive action, the fascia hasn't time to change with the sudden movement.

When a racing greyhound retires, the lucky ones get rehomed into a domestic environment and their activities of daily living change enormously. They are now able to wander freely around the house/garden, go up and down stairs, on and off the sofa, walk for longer on a regular basis and whatever else you choose to do with them! Therefore the dog will be coping with not only old injuries from their racing life, but also new accumulated injuries from their new home environment!

### **How to prevent further injuries:**

- Look at their new environment and make it as easy as possible eg: Raised Feeders
- Rugs on Laminates and wooden flooring
- When training don't force your dog to do something they are uncomfortable eg: many greyhounds are reluctant to sit due to the length of the spine
- Correct Bedding eg: NOT curved plastic basket
- Check their feeding and supplementation, they should be starting a glucosamine supplement now! They should also be given Omega 3 Oil to help skin and coat condition as well their nervous system
- Water – when being kennelled many dogs don't have full access to water– encourage your greyhound to drink more or wet the food. This will help hydrate their muscles and fascia which can help to reduce stiffness
- Appropriate exercise – NEVER let your greyhound run without warming them up first, this is prime for re-tearing old injuries; muscle is more prone to injury when it's cold

- **Attend a Canine Massage workshop and learn how to improve your dogs comfort levels at home – see [www.k9massage.co.uk](http://www.k9massage.co.uk)**
- **Book Your Dogs Appointment with a Guild Member Canine Massage Therapist today!**

**References:**

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Thank you to Natalie Lenton for advice

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