CASE STUDY:

Competing with Popi

The inner thigh muscles of the hind limb that Popi keeps re-injuring are the Gracilis and Adductor muscle. These muscles attach from the pelvis to femur and tibia bone. Their action is to draw the hind leg in and under the body, bend the knee, and extend the knee and hock. They can easily be overstretched and injured in agility work, and are at risk when they are not well developed and exercised sufficiently.

In July 06 Popi attended the Linhay for an assessment. She was in full work and competing, but the owner was concerned she may re-injure and wanted advice on an exercise program to prevent re-occurrence. The owner did not allow Popi to work off lead very often; most free exercise work was done at training sessions 2 times a week. It became apparent that Popi was not doing enough specific muscle training work to achieve suitable strength and muscle support and balance of the hind limbs particularly and she could generally improve on overall muscle development to work at top agility level safely and injury free.

On examination Popi was sound on a straight line but on a left circle a mild shortened stride of the right hind was apparent. There was some muscle wastage of the right thigh circumference and an obvious muscle imbalance with more muscle definition of the front and back thigh muscles i.e. quadriceps and hamstrings in comparison to less defined inner and outer thigh muscles i.e. adductors and abductors respectively. On palpation a taut right adductor muscle band and tendon insertion was felt. A mild soft tissue strain was diagnosed.

The soft tissues were treated with veterinary acupuncture and manual physiotherapy. Advice was given on an exercise/reconditioning program, stretching pre/post exercise, combining straight line controlled work with lateral, circle, weaving work to achieve a good muscle balance of the hind limbs. Popi also started fitness and gait training on the Water Treadmill; free swimming could also be introduced to assist strengthening of the thigh muscles with circles, figure of 8, sharp turns working against the resistance of the water and using jets to increase the work load. Popi remained in full training and competing.

Unfortunately she was still episodically becoming sore after competition. She re-injured the LH adductors at the World Championships in October 2006. Treatment with acupuncture and physiotherapy was administered and water treadmill exercise. An ultrasound scan of the adductor region was advised at this stage to determine the degree of muscle/tendon damage; this is a very useful tool in human sports medicine to help determine a prognosis regarding continued sport. Unfortunately we are still waiting for this scan to be done.

With treatment and exercise Popi continued to become symptom free, a scan would be now be more useful in the acute stage of injury. Since the end of October Popi has continued weekly water treadmill sessions and re-examinations of the musculo-skeletal system. She has continued to put muscle on generally and now has a minimal difference in muscle circumference right to left hind. Popi continues with a daily regime of controlled exercise, gradients/hills, walk, trot, transition changes, physioball/balence exercises, alternate days of circles, figure of 8, weaving, free running, normal agility training sessions.Popi had one recent episode of stiffening up after training, the owner was not able to warm her down sufficiently as she was too excitable, then she travelled home for 2 hours in the car and was stiff on return home. The owner was advised in future to leave the training site, warm the dog down for 15 minutes, use a warm dog coat and special dog thermal pack under the car blanket, then a short walk on return home.

Now in February 2007 Popi has remained sound is in full work and competing. This rehabilitation program takes dedication from the owner to perform the home exercises and general exercise regime. Unfortunately with Popi's chronic injury history it will no doubt mean she is susceptible to re-injury. The scar tissue that keeps developing post strain is non-functional and the muscle-tendon area each side of the scar is put under greater stress during exercise. If the owner continues to work hard on a daily program and with a combined team approach at the Linhay, we will endeavour to keep Popi competing at top level.

Linhay
veterinary rehabilitation

Jubilee Barn
Ashcombe Road
Dawlish Water
Dawlish
Devon EX7 0QW

t. 01626 867614
f. 01626 889911
m. 07921 068088
e. info@linhayvet.co.uk
w. www.linhayvet.co.uk