

Let's Talk Greyhounds

The Newsletter with News, Views and Practical Advice

Issue #2

From the Editor.....

Welcome to our second issue of 'Let's Talk Greyhounds'.

There are a lot of very dedicated owners and trainers who seek regular and up-to-date information on common problems which may affect their greyhounds.

In this issue, we include a brief on muscle injuries and first aid.

We also feature handy hints providing practical advice.

We trust that you will enjoy reading 'Let's Talk Greyhounds' #2 as a source of useful information on the animal and sport we all have a passion for when racing greyhounds.

Good racing,

Dr. John Kohuke BVSc RDA



In this Issue:

- **Muscle injury- what happens and how does the body react**
- Plus Helpful Hints and Much More**

Helpful Hint 1: Building Up Weak, Slower Growing Pups

If 6-12 month pups are down in body weight and lack muscle development for their age, then a supplement of concentrated whey protein isolates, as contained in the product Sprinter Gold Muscle Pro, at 1g per kg body weight, will help improve muscle bulk and strength, in conjunction with light walking for 10 minutes per day. Continue this daily supplement for 2-3 weeks, but reduce it to alternate days once the pups have filled out. Also feed a good quality dry food formulated for growing puppies to provide energy, protein and fat, along with vitamins and minerals, such as Sprinter Gold Whelp 'n' Grow, to supply the nutrients necessary for muscle and bone development. Do attempt to catch up their body weight gain too quickly, as this can result in bone and joint over loading and long term joint and bone problems. Aim for an average weight gain of around 300 grams per week initially, combined with daily exercise to facilitate body development, rather than let them become over weight relative to their size and age.

A Brief on Muscle Injuries and Healing.

When a muscle injury results in tearing of the muscle sheath or internal muscle fibres, the separation of the muscle fibres will give the feel of a 'hole' in the muscle body when felt by careful examination. Minor tears usually result in rapid swelling and inflammation within the muscle fibres and adjacent muscle tissue. In more severe tears, blood vessel rupture will result in leakage of blood into the area. During the healing process, internal microscopic changes are taking place to heal the injured tissue. Initially, during the first 4-6 hours, small blood vessels supplying the injured tissue allow protein and fluid to leak into the injury site which results in the swelling which we can see and feel. This also causes nerve tension and sensation of pain. The cellular responses with migration and congregation of white blood cells then begin.

Within 6 hours, infection fighting cells or leucocytes, and scavenging cells, called phagocytes, are attracted by chemical messengers in the blood and tissue fluid to the injury area. They accumulate in large numbers to control infection and remove damaged tissue.

If there is damage and tearing of muscle or tissue cells, other scavenging reinforcement cells, called monocytes are marshalled to the injury site. Monocytes are much larger specialised cells which can engulf tissue and infective cells. They either digest them on site or transport them to the immune stations in the lymph nodes or spleen for further dissolution via enzyme action.

One of the most fascinating responses to injury is the branching and growth of small blood vessels or capillaries which invade the injury site. This occurs about 48 hours after the injury, about the time the ice packing to reduce bleeding from larger vessels and limit swelling is completed. These branching networks of feeder vessels deliver oxygen, more white cells and nutrients to the battle zone. Once these vessels have brought in the reinforcements and nutrients, they shut down and regress and their structural cells are cleared away by the large monocytes.

Handy Hint 2: Observe the Way a Greyhound Corners When Racing

A galloping greyhound will tend to drift out on the corners, increasing sideways force on the right legs coming out of the corner, particularly if the race track has poorly banked curves with a shifting dirt surface. If a greyhound is already sore on the right hind side, particularly a high hip support muscle injury, when running to the left on a bend (anticlockwise), there is more chance that it will drift out on the corner. If a greyhound with a right hind injury is in the lead at the first turn, it may not only slow-up as it corners, but tend to drift out and risk colliding and bringing any adjacent greyhounds down as well. Conversely, greyhounds which are sore on the left or "railing" side, tend to "cut" into the corner. If running on the outside, they can move across the front of the field, causing an interference and collide with other greyhounds running with them on the inside. Many of these track collisions can be seen easily on the replay of the race track video. Any greyhound which does not take the corner smoothly, should be checked for a muscle or limb injury within 12 hours of the race. It is best to check for minor injuries when the greyhound has cooled down after the race, preferably the following morning before the greyhound is let out into a yard or turn-out pen. Consult your vet for advice and a thorough examination of the greyhound.

Prompt First Aid is Essential

In more severe cases of muscle injury, the surrounding sheath or body of the muscle may split open, allowing the internal fibres to bulge out into the surrounding muscle area. If the blood vessels associated with the muscle fibres are also stretched beyond their elastic limit, they may rupture, with bleeding into the damaged area. A pool of blood can quickly build-up as the heart rate is elevated after a race, to form a "blood blister" or "haematoma" at the site of injury. This can easily be located by a "squelchy" feel compared to the general consistency of the muscle. The greyhound usually exhibits discomfort when examined carefully, even immediately after the race, but a change in consistency is often the only clue to injury when the animal is hot from racing. Prompt first aid is helpful in minimising the long term effects on ruptured and bleeding muscle tissue. An icepack applied to the area will help to restrict the amount of bleeding and reduce the blood clot formation and bruising at the site of injury. This should be held in place for up to 5 minutes at a time over the area where bleeding or deep bruising is suspected. Generally, the gap in the muscle caused by the ruptured fibres and blood vessels, fills up with blood as the vessels leak into the area. The blood clot so formed from the seepage of blood, is a "foreign body" to the actual muscle fibres, interfering with their ability to rejoin and repair. Unfortunately, the blood clot formed is likely to mature to fibrous tissue, which creates a weak spot in the muscle itself. Therefore, it is most imperative to locate these injuries quickly and icepack the area under a pressure bandage to reduce the blood seepage and haemorrhage for the first 48 hours following any muscle injury.

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Dr John Kohnke accepts no responsibility or liability for unseen consequences resulting from the hints and advice given in this newsletter.

Schooling and Breaking-in a Young Greyhound

It is generally safe to school greyhound pups at 12 months of age because the growth plates in their major limbs close at 9-10 months. However, if a pup is overweight for its age, care must be taken to avoid long gallops over 300 metres as the joint cartilage in the wrists and hocks may be stressed by excessive loading, particularly when cornering. It is also important to introduce young greyhounds to circle galloping in a step-wise manner to avoid the development of metacarpal or 'shin' soreness. This is caused by overloading of the lower limb bones before they have time to model and thicken to withstand the increased weight loading on the circle. Therefore, it is usually safer to school young greyhounds on a straight gallop track for this reason. Some training schools educate the pups to the lure over a 2-3 week period and then give them a 2 to 3 months rest period before introducing them to a full racing preparation at 15 months of age. Although X-rays can be taken of the major limb bones to evaluate the stage of closure of the epiphyses or growth plates, a careful schooling program should not cause any undue damage to the muscle and skeletal structures. If a greyhound has prominent growth plates, examination by your vet is advised prior to sending the youngster away for schooling. It is also important to ensure that the young greyhound is given a diet adequate in calcium, vitamin D and trace-minerals, such as a daily supplement of Sprinter Gold Whelp 'n ' Grow, which contains calcium, trace-minerals and vitamins to facilitate the development of strong bones and joints.

Trainers Section: In this section, we answer a common question posed by trainers.

Q. My young racing dog has difficulty in relieving himself after a race. Sometimes he will stand trying to pass urine for 10-15 minutes and appears to be in pain and becomes frustrated when cocking his leg for no result!

The problem you describe is referred to as Post-Race Dysuria, or the inability to 'pee' after a stressful race. It is also referred to as 'bladder shutdown' by trainers. It most commonly affects young, nervy male greyhounds which become over-excited when waiting in the kennels prior to a race or the race itself. It is due to spasm of the bladder sphincter muscle which normally relaxes to allow the urine to flow out. There are 3 stages in severity of the condition. The earliest stage begins as a 10-30 second delay in urine flow after the greyhound attempts to urinate, often in a thin pulsing stream as urethra itself is constricted, which can last for 2-12 hours after a race. The most severe form may last 2 to 48 hours with complete inability to pass urine. In the more severe form, the bladder becomes distended and very uncomfortable, requiring the bladder to be emptied by use of a catheter passed up the urethra by your vet. If not relieved by draining the bladder, the back pressure can damage the kidneys with blood being passed in the urine. In the earliest stage, simply allowing a greyhound to relax and patting to calm and reassure it will help overcome the nervous spasm. However, if the condition lasts more than 12 hours and the bladder becomes distended, then seek immediate advice from your vet. Your vet can prescribe a drug to allow the bladder nerves to relax and enable the animal to pass urine within 15-20 minutes. However, as the drug can be detected for several days after a race, you must seek advice from your vet before you can race the greyhound free of the drug. Do not use a kidney tonic or a diuretic type supplement to encourage urine flow as this can cause a rapid build-up of urine and exacerbate the problem. In most cases, only 1-2 drug medications are required until the young greyhound is able to relax normally after a race and pass urine.