# Talking Dressage

A Newsletter dedicated to Dressage Horses

## from the **editor**

Dressage is alive and well after EI! Many owners and riders have their horses back in training in preparation for winter and spring competition. Most horses affected with EI made an uneventful recovery, but the most consistent side-effect is anaemia, and in some cases, low grade airway disease, both of which can result in reduced exercise tolerance, lack of impulsion and tiring after relatively short periods of work.

We briefly outline typical signs and provide handy hints on assisting recovery. We also discuss lameness and long term measures that may help manage arthritic joints as valuable horses age and have reached their performance goals.

Lower back pain and discomfort is a common finding in dressage horses, with signs such as poor transitions, resisting circle work in one direction, lack of top-line and bulk over the croup and reluctance to become fully collected and push themselves with the hindquarters. We discuss sacro-iliac pain and outline simple exercises that can help strengthen the top-line and hindquarters.

I trust that riders, coaches and spectators will have a successful and enjoyable 3 days at the CDI 2008. And of course, the horses too!

## Regards John Kohnke

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## THIS ISSUE

- ➤ EI Overcoming lingering problems
- ➤ Arthritis keeping horses active as they age
- ➤ Lower back pain simple beneficial physiotherapy

## HANDY HINT

Rubbing the Tail after Worming.

Horses carrying adult Pinworms often rub their tail butts on walls, trees and fences. The adult egg laden female Pinworm travels to the rectum and protrudes her egg laying tail end out through the horse's anus, laying up to 500-600 eggs in a sticky, itchy mass around the anus. The itchy deposit triggers tail rubbing, which dislodges the eggs onto the bedding or ground surface to complete the Pinworm lifecycle. Pinworms are relatively uncommon due to a long 5 month lifecycle and regular use of effective worming compounds. However, some horses continue to rub their tails for 7-10 days after worming because the sticky, itchy mass still remains. Carefully wash around your horse's anus, buttocks (perineal area) and under the tail itself with a Chux<sup>®</sup> or paper towelling soaked in warm, soapy water to remove the itchy deposit. Rinse off with a damp towel. The tail rubbing will stop!

## HANDY HINT

**Greasy Heel - A Useful Remedy** 

Gently scrub off the grease with a warm solution of laundry soap (eg. sunlight soap) using a soft brush. If very inflamed, apply a cortisone/antibiotic preparation for 3-5 days, as prescribed by your vet, then scrub off the scabs. Take care when using prior to competition. Consult your own vet for withdrawal advice. Pat dry, apply weak PVP iodine solution (eg Betadine 5%) twice daily for 2-3 days, or until any broken skin is healed. Each morning apply a thin coating of a zinc cream or lotion to reduce UV reaction. It will help prevent recurrence and repel excess moisture and minimise skin cracking.

## EI – Overcoming Lingering Problems

Horses in good health with a strong immune system are likely to show improvement within 4 to 7 days, although some horses develop a persistent dry cough for 2-6 weeks. Horses that are out of work, or those retired and resting and otherwise healthy and well fed, are less likely to develop secondary complications.

Secondary complications include anaemia, heart muscle damage (cardiomyopathy), poor exercise tolerance, reduced performance and secondary bacterial lung infection and airway disease and occasional colicky signs.

Young horses, particularly foals, 2-3 year old horses and aged horses have been found to most likely develop secondary effects from EI. Horses under stress of training or concurrent illness or injury, are also more likely to develop secondary complications.

Recognition of any possible side-effects and an adequate rest period before returning a horse to training is important to avoid long term complications, such as bacterial pneumonia and pleuropneumonia, as well as concurrent liver and kidney damage. Managing the various side effects are an important aid to recovery of affected horses.

#### Anaemia

Anaemia is not a disease as such, but as a consequence of EI, it can develop in 1-2 weeks after the infection, especially in horses that were under stress or those on a less than adequate or balanced diet before infection or during the recovery period. It may result from bone marrow depression caused by the viral infection or associated toxins. Typical signs include soft swelling in the hind limbs and pale gums, tiredness, lack of stamina, and a dull haircoat. Hosing with cold water for 5-10 minutes can help reduce the 'oedematous' swellings or light exercise by hand walking on a lead can also help dissipate the swelling.

It has been a common finding that horses at grass, although they do not usually suffer a severe form of the disease, are prone to anaemia if they are not supplemented with a hard feed containing a prepared feed with added iron, or a supplement containing traceminerals and vitamins, such as Kohnke's Own Cell-Provide or Cell-Vital.

### HANDY HINT

Although some horses develop a cough and a nasal discharge within 7-10 days after EI infection, and some after EI vaccination, many horses appear to recover uneventfully, but have blood changes indicative of low grade airway disease. Scoping to examine the lower windpipe (trachea) for the presence of mucus strands (more than 2 strands indicates sufficient airway irritation/infection to affect athletic performance) is recommended. A course of a mucolytic agent, combined with a product to provide nutritional support to the immune system, such as Kohnke's Own **Activ-8** for 14-21 days, is recommended.

## Did You Know That ...

It is important to ensure that the hind hooves are not allowed to develop 'long in the toe' or 'low in the heel' shape. If a horse starts to virtually lean back on his heels, the mechanical changes will transfer more strain to the hocks, stifles and lower back, including perpetuating a sacro-iliac injury.

Note: In a horse with sacro-iliac injury or a repeated locking patella problem, ensuring that the toes of the hind hooves are not too long will help to correct the hindlimb angles and reduce lower back overload strains.

### HANDY HINT

A blood count may find a lowered red cell count and Mean Cell Volume (MCV), indicating low grade anaemia. An improved diet with adequate protein and a supplement, such as Kohnke's Own Cell-Provide, Cell-Vital, or Cell-Vital PREMIUM, will help provide nutritional support during recovery.

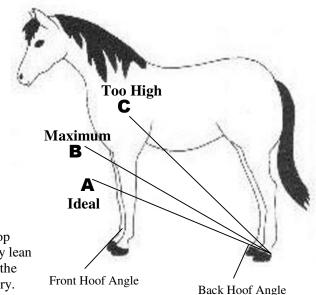
These supplements also contain other trace-minerals and vitamins for general nutritional support for the immune system.

### **Low Grade Airway Infection**

A number of horses have developed a reduced white cell count and higher lymphocytes and monocytes suggesting a chronic, low grade airway infection that has developed as a result of EI. Although some horses are left with a chronic deep cough for 2-6 weeks, if the white cell changes are also present, it does suggest that a secondary bacterial infection has become established.

### **Colicky Signs**

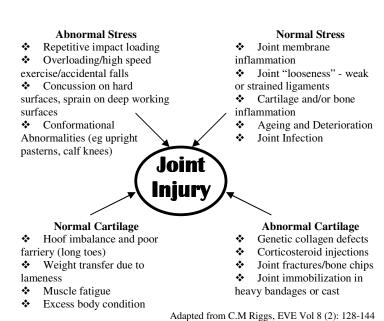
A number of horses with an earlier history of low grade gastric ulcers have developed symptoms suggesting a flare-up in the gastric symptoms. Some horses have developed severe colic associated with an elevated temperature and a couple have died despite intensive therapy and surgery.



Stand 3 metres to the side of your horse and draw an imaginary sight line parallel to the coronary band of the hind limbs – between A and B intersection at the knee is the optimal angle. Trim the toes and raise the hind heels to correct the angle. Refer to Lower Back Pain (Page 4).

## Arthritis — Keeping Horses Active as they Age

Most owners of dressage horses are concerned that the development of joint problems and osteoarthritis in their horses as they age after years of hard work and training, will affect their long term competitive careers. A better understanding of some of the underlying causes and measures to reduce trauma and 'wear and tear' on joint surfaces can help delay the onset of joint changes in horses as they age. Most joint injuries are initiated by the physical disruption of joint structural components due to abnormal loading, overloading and sprain forces, concussion and repetitive mechanical stress. Often joint problems are first noted when a horse is worked on a dried out or compacted arena in the summer time, with shortening of stride and unevenness that progresses to further internal joint change, swelling and lameness.



### **Injury to Cartilage**

Studies have shown that articular cartilage, because it is a very thin layer, only absorb 1-3% of the deformation energy loaded across a joint; with 30-50% absorbed by the underlying bone and deeper bone structures. These processes are aggravated by heavy body weight, imbalanced diets and normal ageing processes. Even heat production within the contact cartilage surfaces during repetitive loading, is thought to result in cumulative deterioration of joint resilience and resistance to loading and flexion as the joint cartilage surfaces slide over each other during exercise.

Continued overloading of an already compromised joint surface, with tearing and disruption along the cartilage matrix wear lines, particularly in knee and hock joints, increases the risk of long term joint damage and osteoarthritis. Subchondral bone structures harden to withstand loading during training and increase the compressive forces on the "sandwich" layer of joint cartilage during high force cyclic loading in exercising horses.

## How to Avoid Joint Disease — Some Useful Hints

The explanation above provides an overview of the mechanical and other damaging causes that can lead to joint disease.

#### Important management measures include:

- 1. Adopt a progressive loading program to increase exercise duration and weight loading over 2-3 months to allow joints to adapt to exercise.
- 2. Avoid compacted (concussive) or deep (sprain) working surfaces. A working 'cushion' of 4-8 cms of supportive material is ideal.
- 3. Ensure adequate warm-up, but avoid tight bandages and boots that may retain heat within joint and tendons.
- 4. Regularly check joints for signs of swelling, warmth and restricted mobility.
- 5. Consider joint support bandages (Protekta Wrap/Polo wraps/Sportsmedicine wraps etc.)
- 6. Maintain optimum hoof balance and toe length by regular farriery or skilled barefoot trimming.
- 7. Avoid excess body condition or heavy horse/rider combinations.
- **8.** Cool joints out by icing or hosing with cold water after hard exercise to help control inflammation and avoid heat retention.
- 9. Provide a balanced diet containing joint cartilage nutrients such as copper, zinc, manganese and Vitamin A (eg Kohnke's Own Cell-Vital/Cell-Provide).
- **10.** Consider the use of a joint supplement, containing at least 5-7.5 g of glucosamine per daily dose, as horses age or are competed at upper levels.
- 11. Seek advice from your vet if you are concerned about any joint swelling or 'stiffness' in a horse's action.

## HANDY HINT

Surveys indicate that dressage horses are prone to arthritic changes in the hock joints, as the first joint affected due to 'impulsion' loading, then the front pasterns, the middle knee joint and lastly the fetlocks. When purchasing a young horse for dressage training, ensure that it has well conformed and strong hocks and is sound in all other joints. In an older advanced horse, it is important to seek a soundness check, focusing on the hocks, pasterns, fetlocks and knee joints, as these are the high risk joints that are more prone to 'wear and tear' and arthritic change as a dressage horse ages.

## LOWER BACK PAIN - SIMPLE BENEFICIAL PHYSIOTHERAPY

Lower back pain can cause changes in gait and behaviour, loss of impulsion and resisting transitions in dressage horses. Sacroiliac ligament strain and joint sprain, stress fractures and chronic arthritic pain account for 50% of all back injuries. 15% of all horses with back problems have been shown to have chronic, long standing sacro-iliac joint injury. Because a rider is positioned 'deep in the seat' when performing dressage, more weight loading is imposed on the lower back and croup.

#### RECOGNISE THESE SYMPTOMS?

- ★ Difficulty or resistance in turning to one side or inability to work around a bend or circle on one side – the horse has one 'good' rein and one 'bad' rein.
- ★ Resisting transitions and breaking gait when asked to canter or work with hindlimb impulsion.
- ★ Dipping the back when ridden in a 'collected' gait.
- ★ Working with one hind leg swinging in under the hindquarters, especially when turning.
- ★ Dragging the toe(s) of one or both hind limbs when walking, often with a short hindlimb stride.
- ★ Bucking or raising the head when asked to move to a canter.
- ★ Failure to develop top-line and croup muscles, with short hind limb stride movement.
- ★ Intermittent lameness and shortened stride in the diagonal front limb.
- ★ Swishing the tail when under saddle.
- ★ Presence of a 'hunters bump' or prominent sacrum area just in front of the rump and a raised tail position in chronic cases.

### HANDY HINT

Press just in the front of the imaginary line as illustrated to evaluate sacro-iliac sprain and tearing – affected horses will dip in the back. Also press down along the rear edge of the pin bones for reaction to pain.

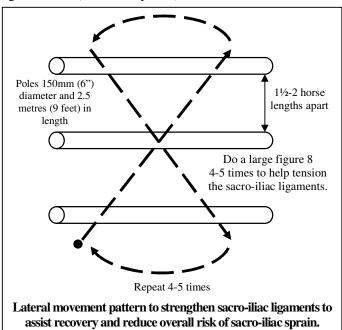
Consult your vet for a diagnosis,

### HANDY HINT

When massaging, close the fist and roll it over onto the top knuckles in a kneeding action, working towards the midline around the sacrum and spinal column.

#### **Diagnosis**

The diagnosis of sacro-iliac discomfort is based on symptoms and examination of the sacro-iliac region by pain reaction to deep finger palpation around the dorsal sacroiliac ligament attachments. Refer to "Locating Ligament Tears" diagram in right column to locate the painful ligament tear (Press here points).



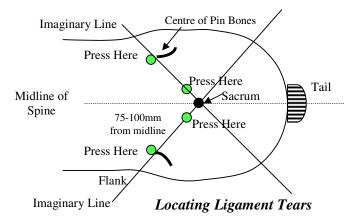
### Muscle XL

After the initial 10 days of pole work, Kohnke's Own Muscle XL (60g daily) can be given as directed within 15 minutes after training for 10-14 days to provide amino acids to assist muscle development and strength of the topline and croup.

#### **Therapy and Treatment**

Massaging over the sacro-iliac on both sides (for 30-60 seconds on each side) before exercise, and then walking over 3 ground poles spaced 1 ½ - 2 horse lengths apart at a 45° angle approach in a 'figure 8' pattern (see diagram), 4-5 times during warm up, will help to flex and twist the sacral and pelvic area as the horse lifts each leg individually as it walks over the poles. This simple exercise can be carried out before training each day as a 'warm-up to a day's work.

Once under saddle, walk the horse at an angle as in a 'shoulder in' lateral movement for 4-5 "zig zags" across the arena will further help to strengthen the sacro-iliac ligaments and associated joint structures.



### **If Sacro-Iliac Sprain is Present**

- 1. Massage and walk over poles daily for 10-14 days walk each day on a lead (do not ride) over the poles as a 'warm-up' exercise.
- 2. Place the feed bin up off the ground to avoid tensing back when head down feeding.
- **3.** After 7 days if improved, start straight line light trotting, but monitor response.
- **4.** Check the hind hoof angles See page 2 (Did You Know That)