

Back problems

Severe problems are very incapacitating and give rise to obvious clinical and X-ray findings. Amongst these comes the 'wobbler syndrome': the animal loses the ability to co-ordinate his movements, crossing the hind legs and 'wobbling' from side to side. The cause is pressure on the spinal cord within the canal. Other than spinal decompression – an operation to remove the pressure – little can be done.

Vertebral and pelvic fractures manifest with reluctance on the animal's part to move, and every indication of severe crippling pain associated with gross muscle wasting. Any form of treatment calls for close veterinary supervision; all cases eventually require muscle stimulation and rehabilitation. The 'problem back' is the one producing some signs of discomfort and reduction in performance ability, but without obvious clinical findings. These types of back are almost certainly a result of ligament strain and associated muscle problems. A disturbing feature of the aching back is the fact that the great majority of so-called 'backs' are not backs at all. Soreness and discomfort in the back have occurred as a result of a problem in a limb causing the horse to work out of balance, the uneven stresses falling on the back. The uneven stresses cause pain and the 'back experts' have a field day. The answer is to find and cure the limb problem, and then the back will recover. A recent case, seen for recurrent problems in the withers and many times manipulated, was found on examination to have a fracture of a pastern bone.

The problems in the lumbo-sacral area may well be explained by considering both the pivot areas of limb movement and the dissipation of the G force stresses experienced when a single limb hits the ground at fast paces. As already discussed, the G force is in the region of 350 times the horse's own body weight. At walk and trot, the front legs pivot around the upper part of the shoulder blade and the hind legs around the hip joint (during the gallop phase, the pivot point for the hind legs moves to the lumbo-sacral junction). The shock waves generated as individual feet hit the ground travel up the limb involved, not as one smooth wave motion but as a series of intermittent stresses; those from the forelimbs angle backwards and terminate at the thoraco-lumbar or lumbo-sacral junction – the length of the back and muscle mass of the animal determining the final location (the longer the back, the further forward the impact). The hind limb forces travel upwards through the gluteal mass, then angle forward and terminate at the fourth or sixth cervical vertebrae. The two impact energies cross in the thoraco-lumbar or lumbo-sacral area; thus at fast speeds and when jumping, all the major stresses arrive at the point of hind limb pivot in the loins.

The sacroiliac joint provides a second problem area. The 'joint' is not a true joint; no movement occurs between the two bone surfaces. It is a meeting place of two bones. Injury to the ligaments supporting the joint causes instability, with subsequent pain and loss of efficient movements of the hind limb of the side affected. Amongst the reasons for muscle atrophy, was the absence of an adequate nerve supply. Damage to soft tissue causes local swelling. Superficial swelling causes the skin –endowed with elastic properties – to stretch, the skin stretch relieving the pressure on the

deeper structures. In areas close to the vertebral column, the swelling has no escape route. The muscles of the back are supplied by nerves lying in and around the tissues which are damaged by excessive strain to the loins and pelvic area. The resultant swelling, in some cases, presses on the motor nerves supplying the back muscles, with subsequent temporary loss of communication to the muscle supplied by that nerve. There is immediate atrophy of muscle, with all the associated problems: loss of support for that sector of the back, loss of stability in the joints, excess strain on the ligaments which partner the muscle involved, uneven muscle balance in the area – all factors that, without treatment, will lead to continuing malfunction of the area. To summarise, first seek the cause: it may not be in the back, especially if recurrent episodes are reported. If there is a genuine back problem, reduce the pain, stimulate the appropriate muscle groups, re-educate the movement pattern, check the saddle fit and find the cause. Or could it be your back problem causing the horse's? An interesting case history is worth relating.

Treatment consisted of magnetic field therapy, ultrasound, muscle stimulation and eventually re-schooling. At the end of three months, the horse was back in work, happy and pain free but reluctant to jump.

A wide range of conditions can be mistaken for back pain by owners, including:

- _ hindlimb lameness
- _ hypersensitivity of the back ('thin skinned')
- _ initial stiffness and hypersensitivity to saddling and mounting ('cold backed')
- _ ill-fitting saddle
- _ poor schooling or riding
- _ temperament problems
- _ lack of ability of horse to perform to owner's expectations
- _ cervical or thoracolumbar spinal cord compression presenting with weakness or stiffness behind.

Back pain may cause horses to resist ventroflexion (extension of the thoracolumbar spine), dorsiflexion (flexion of the lumbosacral region) and lateral flexion (when blunt instrument is run over the lateral sides of the back on both sides).