



Chiropractic Co-Management of Equine Kissing Spine

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OVERVIEW

Kissing Spine is a common cause of back pain in equines. It has the potential to cause a significant degree of pain, which can result in various signs and symptoms; bucking, rearing, bolting, reduced ridden performance such as refusing, rushing, tension or lameness. Horses may also exhibit behavioural change during grooming, tacking up and mounting.

Kissing spine is also known as Dorsal Spinous Process Impingement or Basstrup's disease. It is most commonly found between T10-18. Kissing Spine is a common radiographic finding but does not always cause clinical symptoms. In one study over a seven year period, a cohort of 4407 horses, presenting with lameness of performance issues were evaluated, 7% were found to suffer from back pain on clinical examination. 70 horses that had never had any history or sign of back pain were also radiographed. Of the group with back pain 68% had some radiographic findings of kissing spine and the non-back pain group had radiographic findings of kissing spines in 39% of the horses.⁽¹⁾ When they are symptomatic they are the second most common back pain diagnosis in horses, with short backed horses being more commonly effected.⁽²⁾

The lesion is usually located between T10-18 and may rarely occur in L1-6. Abnormal X-Ray findings are easily assessed on findings on the dorsal area of the spinous process and severity can be graded from 1-4.

CASE STUDY

Below is a case study about the co-management of kissing spine incorporating Conventional Veterinary medicine and Veterinary Chiropractic.

"A" a 4 year old Irish Sports Horse gelding presented with a radiographic diagnosis of Kissing Spine. His rider reported a number of ridden issues, the horse was very hard to relax under saddle and had particular issues with the left canter, he would hang on the inside rein, raise his head, hollow his back and rush. If the rider asked for a reduction in pace and an increase in collection the horse had the tendency to perform a 4 beat canter. When asked to jump the horse would rush his fences and not bascule correctly.

"A" had received an injection between the spinous processes 12 weeks prior to Chiropractic treatment and his rider reported that all the aftercare advice had been followed.

Visual observation of the horse revealed underdeveloped trapezius and a high wither. On palpation Longissimus dorsi was hypertonic and horse yielded to light pressure. Abdominal reflex and hip flexion reflex was poor.⁽⁶⁾

"A" initially received 3 treatments with an interval of 14 days between treatment. Direct adjusting around the affected vertebrae was avoided, instead

concentrating on areas of restricted movement elsewhere in the spine. Which in his case was marked restriction in the lumbosacral junction and reduced extension of left sacroiliac joint and restricted left lateral flexion in the lower cervical spine.

Aftercare advice involved the use of heat, hip flexion reflex and abdominal reflexes to stretch the hypertonic extensor muscles. The training regime was discussed with long and round work, trot poles and hill work suggested as exercises to further enhance the treatment. The horse was already being fed off the floor and had daily turn out.

After three treatments there was an improvement in appearance of the "topline" with a reduction in hypertonicity of the Longissimus dorsi and horse was no longer yielding to firm palpation of the paraspinals. "A's" rider was happy with the improvements in her horse, his canter was improved and his tension was reduced.

Over the last 12 months "A" has successfully competed in affiliated dressage competitions at Novice level and 1* eventing. His symptoms have returned on a number of occasions but his symptoms quickly improve with Chiropractic adjusting and continued strengthening exercises performed by his rider.

Grade 1 - Visible narrowing of the interspinous space

Grade 2 - Desensification of the margins

Grade 3 – Bone lysis adjacent to the margins

Grade 4 – Severe remodelling

Assessment of how symptomatic a lesion is can be aided by injection of a local anaesthetic into the interspinous space.⁽³⁾

There are numerous treatment options available; conservative care; manual therapies, shockwave therapy and lasers, medications such as Corticosteroids, Sarpem and Tildren, and surgical approaches such as surgical ostectomy and division of the interspinous ligament. Tack fit, farriery, riding technique with appropriate schooling exercises should not be underestimated for their impact upon pain levels and function.^{(4) (5)}

Kissing spine, when symptomatic has a tendency to have periods of recurring symptoms, often after a period of rest from work, presumably due to a reduction in core strength.⁽⁵⁾

CONCLUSIONS

Recurring back pain does seem to be a common theme in horses with Kissing Spine with a history of being symptomatic.

There are many approaches to the management of Kissing Spine and various factors will dictate which approach is most appropriate, such as;

- Classification of severity of the impingement on X-Ray
- Severity of the behaviour displayed ie: is the horse dangerous to ride or is he simply displaying reduced athletic ability.
- Value of the horse
- The job that the horse is expected to perform.

Treatment of kissing spine is not straightforward and it is hard to assess which cases will respond to conservative care, medication or surgery.⁽⁷⁾ Chiropractic research in this area is in its infancy and although there is much anecdotal evidence more research needs to be made both into efficacy and which cases of kissing spine are likely to respond to conservative care, and which would be best suited to more invasive treatment.

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