

Orthopedics and Wound Care

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Kissing Spines: Common, But Not Career-Ending

Kissing, while generally considered favorable in its usual context, isn't always so great when it comes to horses' vertebral surfaces. Overriding spinous processes—known as kissing spines—can cause severe back pain, said Tracy Turner, DVM, MS, Dipl. ACVS, of Anoka Equine Veterinary Services, in Elk River, Minn., but not all horses with the condition have complications because of it. Turner described a study in which he determined kissing spines are more likely to cause clinical problems in certain breeds, disciplines, and ages, and that a particular combination of therapies can produce successful outcomes.

Of 4,407 horses Turner saw for lameness, 7% of the cases, or 310 horses, displayed back pain. He conducted a complete lameness exam, including thermography and radiography, on each of these horses to rule out other potential pain causes. This narrowed the group to 212 horses (68% of the back pain horses) with kissing spines.

Among horses with back pain and kissing spines; back pain and no kissing spines; and a control group, Turner discovered:

- Kissing spines make a horse three times more likely to have back pain.

Also, horses with pain/kissing spines:

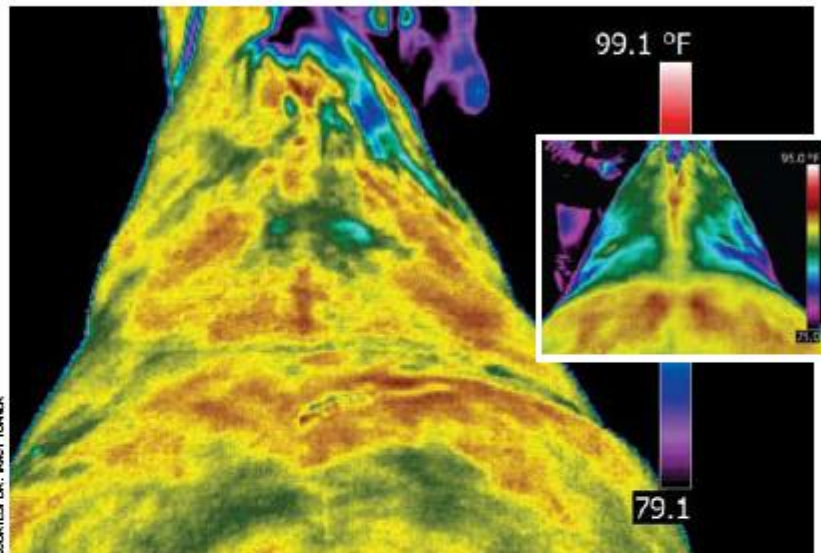
- Most commonly were Thoroughbreds, Thoroughbred crosses, Quarter Horse types, and Warmbloods;

- Were 6 to 10 years old; and

- Forty percent were dressage horses (notably, 23% of horses with back pain/no kissing spines were dressage horses).

He noted that 27 (39%) of control horses had kissing spines; of seven Thoroughbreds in that group, six had the condition.

Painful horses' ground behavior ranged from hypersensitivity when brushed to girthiness when saddled. When ridden, horses bucked, reared, kicked out, and displayed rear limb dragging, head tossing, and excessive shying. Riders complained horses were hard to get on the bit,



Thermography is a very useful method for detecting where pathology might be in horses with kissing spines, such as in the affected horse above. A scan of a normal horse is shown in the inset.

hollow, behind the leg, slow to warm up, stiffer one direction, and exhibited poor transitions.

"Dressage horses were distinctly over-represented," he observed. "Dressage is one-third of eventing, so over 50% of horses with kissing spines (in this study) are in some kind of dressage."

So, why dressage horses? "There are a lot of arguments ... the horse is asked to engage its hind end, the rider does more sitting, and the horse is compressed more," Turner opined. Also, "Dressage riders are so attuned to how that horse moves (so it may be that) they complain sooner."

Treatments Turner employed included shock wave therapy, mesotherapy (multiple intradermal injections made over the back, croup, and withers), corticosteroid injections, saddle fitting changes, and exercise. He assessed outcomes using owner and veterinarian evaluations, finding:

- Horses reached "good" to "excellent" in 86% of the cases with a combination of shock wave, mesotherapy, and exercise;

- Sixty-three percent reached good to

excellent with mesotherapy alone, and 59% with corticosteroid therapy alone;

- "Horses respond very markedly with age," said Turner, who reported that only two horses less than 5 years improved. There were four "absolute failures" in the same age group;

- Owners refitted saddles for 29 horses; in 13 (45%) the refit helped. Eleven of these (85%) were dressage horses.

Turner concluded by describing kissing spines as a developmental condition. "I think genes cause it. It does not cause lameness but it does predispose (a horse) to lameness. Thoroughbreds are predisposed. After looking at all the data, kissing spines must go with speed or some other trait that we've bred the Thoroughbred for."

A horse with back pain needs to be worked and trained to lift up his back as a part of recovery, he explained. And, importantly, veterinarians should employ a combination of medical treatment and other approaches to address kissing spine-related pain. For more results from this study see TheHorse.com/19457.