

Kissing spines explained



Kissing spines is a painful and debilitating condition. Vet **David Rutherford** of Fellowes Farm Equine Clinic explains more about the condition and the new treatment options available



Standing surgery for kissing spines is now becoming common practice

The condition



The condition usually affects the region under the saddle

'Kissing spines' is a term used to describe a condition where the pieces of bone that project upwards from a horse's back bone (the dorsal spinous processes, or DSPs) become too close together and start to grate on each other, causing pain.

It's most commonly found in the middle of a horse's back under the

saddle region, but can occur anywhere along the spine. It's a progressive condition that usually affects horses aged between seven and 14.

Kissing spines is quite common in larger breeds, particularly Thoroughbreds, and rare in ponies. I personally think that horses who begin their ridden life before they're skeletally mature are at greater risk

of developing kissing spines later in life, for example Thoroughbreds who begin flat race training as a two-year-old. Horses can continue to perform well while the disease is developing. Signs of a problem then start to occur once a certain severity is reached.

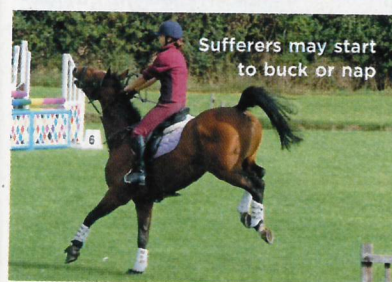
Symptoms & diagnosis

Horses with kissing spines will struggle to perform well under saddle, and show signs of pain in their back - though this discomfort can present itself in different ways.

The first thing you may notice is a lack of forward movement, especially in canter. Bucking, refusing jumps or reacting when the girth is tightened or the rider mounts are other signs.

To diagnose kissing spines, radiographs (x-rays) of the DSPs is the usual first step. Kissing spines is suspected when the gap between the DSPs narrows and, in some cases, the bones are touching. Often the bony margins will have areas of increased density (which shows as white on an x-ray) and areas where the bone has partly dissolved (black on an x-ray).

In very severe cases the diagnosis may be based on x-rays alone, but this can be problematic as some horses with quite nasty radiographic abnormalities can in fact be completely pain-free in this area. Therefore either bone scanning, or nerve blocking the area and observing an improvement in ridden performance, is usually necessary to confirm the problem.



Sufferers may start to buck or nap

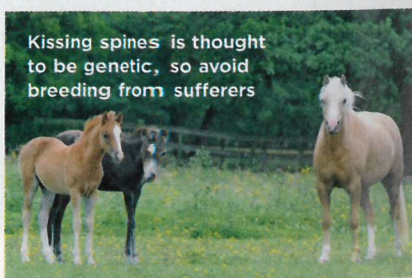
Prevention

As kissing spines is a naturally occurring, progressive condition, prevention is unfortunately not possible. There are, however, some things that can be done to help reduce the risk.

Experts believe there is likely to be a genetic component to kissing spines, so breeding from known sufferers should be considered very carefully.

In addition to this, it's wise to avoid any ridden exercise until a horse is approaching his or her skeletal maturity at three to four years of age. This will give his bones the best chance to develop as they should.

Before you buy a horse, ask your vet to take survey radiographs of his back as part of the pre-purchase exam (otherwise known as a vetting).



Kissing spines is thought to be genetic, so avoid breeding from sufferers

Sadly, if a defect is found, this won't mean the horse will avoid developing kissing spines in the future, but it will at least minimise your risk as a potential buyer.

Finally, bear in mind that the condition is worsened by the action of riding your horse, so symptoms will develop quicker the more work you do with him.

Treatment



Surgery is an effective treatment

Once a diagnosis of kissing spines has been confirmed one of three routes can be taken. The first is medical treatment which, while it won't cure the problem, will allow the horse to continue working.

Treatment consists of a combination of oral painkillers, anti-inflammatory cortisone injections into the affected part of the back, physiotherapy and

altered training methods. This will improve the situation, but rarely resolves it and, as the condition worsens, it becomes less effective.

The second is surgical treatment to create a larger gap between the impinging bones. In some situations wedges of bone are removed, and in others splitting the ligament between the bones is sufficient.

Often the procedure is carried out under standing sedation with local anaesthetic, rather than under full general anaesthesia.

The exact method of treatment will depend on how severe the impingement is, and on the preferences of surgeon and owner. The final option is no treatment, which will ultimately result in retirement or euthanasia.

VET'S CASE NOTES

Kissing spines presents itself in numerous ways. Here, vet David Rutherford explains one case he treated.

"Mac* was an eight-year-old Thoroughbred gelding who had been owned by Janet* for two years," says David. "They had successfully undertaken all sorts of activities and everything had been fine until Mac started to show discomfort when his girth was tightened and became resistant in ridden canter.

"Janet persisted in her training, pushing Mac on, but when he started bucking she decided to have him checked out as this behaviour was out of character," explains David.

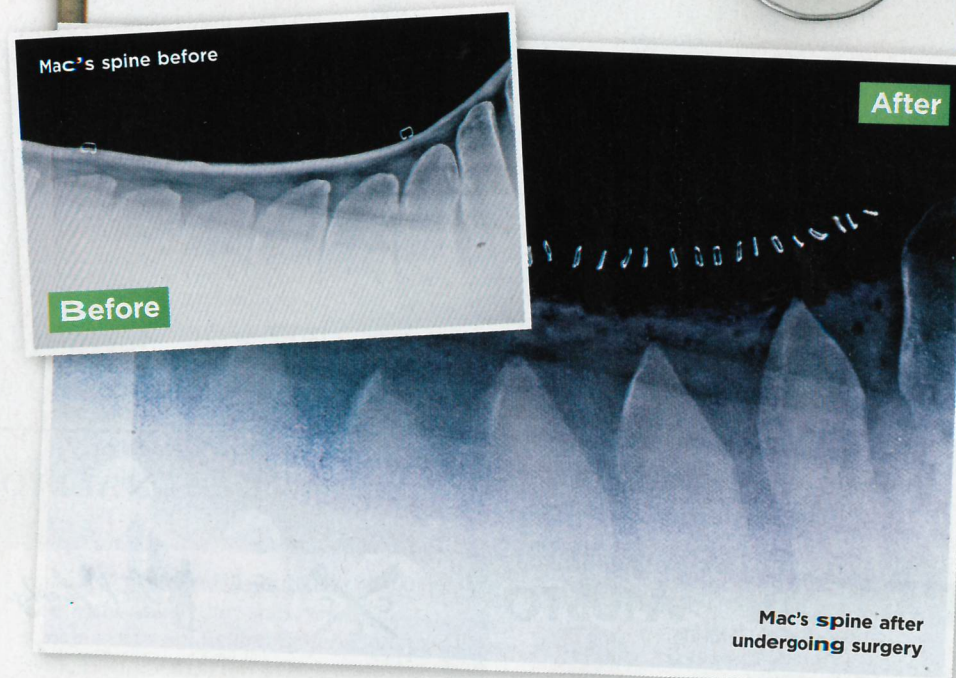
"Although Janet wasn't heavy, I noticed that Mac grunted and moved sideways when she mounted," David adds. "His gait was much stiffer when ridden than it had been in-hand, with a high head carriage and, after several minutes of riding,

Mac simply stopped and refused to move forwards.

"Radiographs of Mac's DSPs were taken and kissing spines was suspected. To confirm this, and rule out any other problems, a bone scan of Mac's neck, back, pelvis and hind limbs was also performed. This revealed a significantly abnormal region in Mac's back in the same location as the kissing spines had been seen on the radiographs, confirming the diagnosis.

"Janet opted for surgery to help Mac, performed under standing sedation and local anaesthetic," explains David. "The operation went well and Mac was discharged from hospital days later.

"Seven months later Mac was back in full exercise, performing well and jumping better than he ever did."



Mac's spine before

Before

After

Mac's spine after undergoing surgery

Call the vet

If you suspect your horse is in pain and suffering from kissing spines, call your vet. Prompt recognition of the signs will help reduce his discomfort and a solution can be sought to help rectify it.