

A crank cavesson  
fitted correctly



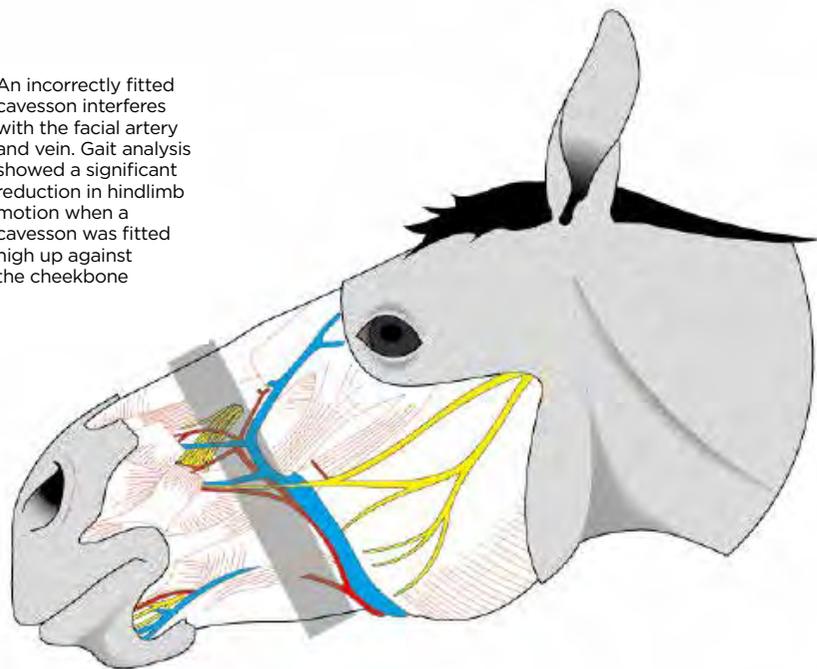
# *No pressure*

**VANESSA FAIRFAX**, from Fairfax Saddles, shares some recent scientific research into choosing bridles and nosebands to help avoid pressure points

**Y**our choice of noseband has a huge effect on the pressure exerted under the horse's headpiece, as well as on extension and flexion in both the forelimbs and hindlimbs.

"Armed with this knowledge, it makes sense to embrace the noseband options and explore our choices. We should devote as much time to finding the perfect noseband as we spend trying different bits," explains Vanessa Fairfax, who spent two-and-a-half years testing the effects of bridle and noseband pressure. »

An incorrectly fitted cavesson interferes with the facial artery and vein. Gait analysis showed a significant reduction in hindlimb motion when a cavesson was fitted high up against the cheekbone



Crank nosebands became a hotly debated topic in the run-up to Rio, but not all perceived noseband knowledge is based on scientific evidence. Vanessa is one of the few designers to have conducted and published scientific research into bridles, and has long championed the importance of sharing the company's findings to help riders make the best tack choices.

Vanessa and her team use pressure mats positioned at various locations under the bridle and take readings with the horse in motion. Along with pressure measurements, the effect of each noseband – in terms of stride quality – is recorded using Centaur Biomechanics gait analysis. Not only does she know which nosebands exert most pressure, she is able to tell exactly what this does to the horse's way of going.

#### NO NOSEBAND?

Bridle testing proves that the right noseband is, in fact, an essential piece of kit. Horses wearing no noseband at all demonstrate loss of stride control and compromised quality of movement, plus

Check that a cavesson noseband provides clearance below the bottom of the cheekpiece to eliminate potential pressure on the facial artery and vein. This applies to any noseband

the rider's ability to control turns is reduced. Also, of course, if you want to compete in affiliated dressage, you need to wear a noseband.

#### EVERYONE USES A FLASH, SO IT MUST BE OK?

The flash has become the go-to noseband of choice, but, alarmingly, scientific trials

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Vanessa Fairfax

reveal it as the worst choice. Vanessa explains: “The flash is based on two fixed rings strapped around the horse's nose working antagonistically against his movement to create extreme pressure on the nasal bone and jawbones. The attachment of a flash strap drags the front edge of the upper ring down and into the nose bone, heaping even more pressure on this area.”

#### WHAT'S THE ALTERNATIVE?

Recent BD rule changes mean that the grackle (along with the drop noseband) can offer competition alternatives to the flash. During trials, both these styles far outperformed the flash, both in terms of reduced pressure and greater range of movement in the horse.

Current thinking is that a grackle is a severe piece of kit, but pressure testing proves it to be the best-performing noseband, and Vanessa champions it as the



**BRIDLE-FITTING TIPS**

- Take a good look at the anatomy of your horse's head – note any asymmetry or areas of potential restriction (such as a small distance from the corner of the mouth to the base of the cheekbone).
- When your noseband is fitted, it should be sitting centrally and symmetrically.
- You are aiming for harmony from your tack, not an antagonistic effect from the noseband.
- If the bit isn't fitted properly, the whole unit will be displaced and nothing will work harmoniously.
- Make sure all buckles are clear of the lips or jawbones.
- Bridle numbers cause asymmetry around the head. Put them on the saddlecloth.
- Fly bonnets can aggravate pressure points. If you absolutely have to use one, wear it at home for schooling, not just on competition days.

**SIX HIGH-PRESSURE ZONES ON BRIDLES**



preferred choice for starting a young horse. Grackles or drops can also help address issues such as mouth opening, or the horse ‘dropping off the contact’, but according to Vanessa, they don’t clamp the mouth shut in the same antagonistic way as the flash.

**CRANK VS CAVESSON**

If you’re competing in a double bridle, the only option is a cavesson. Until Vanessa’s scientific testing, this was widely considered the kindest option.

The most unexpected and controversial finding in Vanessa’s scientific trials is that a crank noseband exerts less pressure than a cavesson fastened at the same tightness.

She explains: “Built into the circumference of a crank are additional rings, which provide articulation and allow the noseband to move in harmony with the motion of the horse’s head as it rises and falls during each stride. A fixed cavesson ring is rigid against the nose, and therefore exerts pressure each time the horse moves. Consequently, in a crank, the horse’s movement is significantly better.”

A crank has the added advantage that it can be fastened to ensure the buckle doesn’t sit on the jawbone and aggravate

this sensitive pressure zone. In the wrong hands, a crank noseband is open to abuse from over-tightening, and it’s this malpractice that has led to its bad reputation. Correct fitting of any noseband is essential for it to perform correctly.

**HITTING A NERVE**

There’s a lot of discussion about facial nerves and bridles, but the scientific trials reveal the biggest area of concern to be the main artery and vein that run below the horse’s cheekbone (see the diagram on page 39). When these are restricted, the horse’s hock flexion is significantly affected and the noseband with the biggest potential to interfere with this area is a cavesson fitted too high.

If you have to wear a cavesson for competition purposes, make sure it is fitted with clearance for these vessels.

**About Fairfax Saddles**

Fairfax uses technological research and testing methods to develop and scientifically prove its range of saddles, girths and bridles. A peer-reviewed scientific paper on the Performance Bridle was published in the *Journal of Equine Veterinary Science* (ref 35 2015 947 955). [www.fairfaxsaddles.com](http://www.fairfaxsaddles.com)

Now BD legal, the grackle noseband offers a competition alternative to the flash. Note how the ring is positioned to avoid pressure on the edge of the cheekbone as well as the artery and vein below