

The Girth Pain Story Continued. Ten insights from 3000 or more treatments.

My passion for the cause of girthy horses' started many years ago when I saw one of my patients change from a nervous, flinching mess that used to buck at the drop of a hat, to a calm relaxed horse that seemed to be asking what all the fuss was about. The change was close to instantaneous and followed my "adjusting" the vertebral mobility of his wither using Willoughby Veterinary Chiropractic.

I now have the records of the responses of more than 3000 treatments of abnormal girth area sensitivity and a master's degree study on the response of girth region sensitivity to Willoughby Veterinary Chiropractic behind me. The research done for my master's project, and careful observation and enquiry over the last six years has led to the unfolding of an amazing picture that has shown that there is much more to the problem that causes horses to be girthy than I could ever have been imagined. What I want to do in this article is to give you a viewing of the main insights that have developed from both treating these horses and the extensive research that I have conducted into the problem. I must say that these insights are not scientifically proven, but all the same have stood up to repeated testing in the clinical environment.

Insight No 1. Girthy horses are definitely suffering pain or discomfort and are not just behaving badly. Consistently girthy horses show abnormal reactivity of the tissues of the girth area behind their elbow. Of the exact nature of the sensation that causes the reactivity we cannot be sure. If we extrapolate from human experience of spinal mobility faults, which are similar to that found in girthy horses, the sensation probably varies from debilitating pain as severe as a human having a heart attack, to a burning or itching sensation. Symptoms of the abnormal reactivity always decrease in severity with effective treatment of the vertebral mobility dysfunction of the wither. Once the spinal mobility faults of the wither region of the spine are corrected the horses consistently become much more tolerant of their girths.

Insight No 2 Abnormal sensitivity of the girth region is present in a high proportion of young

foals from birth onwards. All degrees of reactivity of the girth region tissues are seen, from mild to severe. In some foals and older horses the reactivity may not become apparent until after a trip or fall, and most especially falls which involve going over backwards onto the wither.

Insight No 3 Abnormal sensitivity of the girth region is generally worse on one side of the chest than the other. (If this were just a behavioural problem why would this be so?) Most often the right side is the worst. Ponies most often get girth gall on the worst side.

Insight No 4 Foals appear to favour one front leg from birth. Dr Deb Bennett refers to this as "leaning". Affected foals tend to stretch forward with their good leg when they have their head down eating. They lean on this good leg and keep their weight off the affected side, leaving this leg back. Repetition of this pattern over time contributes to a one sided pattern of body use.

Insight No 5 Horses have trouble changing leads on the side they have the abnormal girth sensitivity and smaller hoof. Many of these horses are just considered to be one-sided as a result of one-sided brain dominance. Treatment of the source of the abnormal sensitivity of the girth region usually results in these horses being much more even in their leads.

Insight No 6 The favoured leg usually develops a smaller or more boxy foot from an early age. Sometimes the difference between feet is quite subtle, sometimes very marked. The favoured foot has a narrower, higher heel. The other foot tends to be bigger, wider and to have a low heel. Often the favoured foot is tender around the heels. Many farriers try in vain to even up this imbalance in foot size, with the feet continually coming back to the same shape. (Hooves in fact respond to the amount of weight on them – the less weight they carry the narrower and higher in the heel they get. Many of us experience this when one of our horses sustains a nasty wound to the coronary band that makes it very lame for a period of time. While the horse is not putting much weight on the foot the foot contracts very rapidly.)

Insight No 7 Along with girth sensitivity there is tightness and tenderness of the triceps and skin muscles at the back of the foreleg. When tight theses muscles prevent the foreleg stretching forward and so make it uncomfortable for the horse to lengthen its stride when going from a trot to a canter, especially when the affected side is on the inside of the circle. Bucking or pigrooting is often associated with this

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discomfort. The tightness also makes it uncomfortable for the affected leg to be stretched forward by the rider after girthing up. The tight triceps muscles make up a major part of the stay apparatus of the forelimb, and if tight prevent full weighting of the back of the hoof, thus preventing full expansion of the hoof of the affected side, and so contribute to that foot being narrower and higher in the heel.

Insight No 8 In conjunction with the spinal restriction of the wither region there is commonly restriction of the spine of the lower neck. This may occur on the side of the horse with the abnormal sensitivity of the girth or on the opposite side. Symptoms seen with the neck restriction are tightness and tenderness of the muscles of the lower neck and the front of the shoulder. Mild lameness on the affected side is quite common.

Insight No 9 Saddle fit can be a major problem with girthy horses. Abnormal sensation in the girth region is also associated with tightness and tenderness of the spinal muscles which extend under the front of the saddle. As a consequence even well matched saddles tend to create muscle damage and pain under the front of the saddle. The weight of the rider coming down on the front of the saddle produces what is called compartmentalisation of the wither muscle – the wither muscle is sandwiched between the bone of the vertebrae and the front of the saddle while it is under tension from within itself. The consequence is poor blood flow to the muscle, resulting in a build up of heat and other waste products, all which tend to damage the muscle. Secondly the combination of the tension in the triceps muscle at the back of the elbow and the higher heel of the foot of the affected side cause the shoulder joint to move forward and the shoulder angle to decrease. This flattens the shoulder blade of the affected side against the ribcage. The usual outcome is that the saddle falls to the affected side of the horse, and the rider ends up leaning to the opposite side to keep balanced (and then 1. the rider gets in trouble with the instructor for sitting crookedly and 2. the rider develops back problems too) Thirdly because of discomfort/pain and secondary fear, many of the more affected horses tighten themselves in the chest and keep their wither dropped when under saddle. This results in bulking of the muscles at the base of the wither. These muscles too get sandwiched by the saddle and end up damaged and sore, causing the horse to tense up all the more. These horses lose progressively more muscle around the wither and

top-line in general, drop increasingly in the back, get more and more erratic in their behaviour, develop “kissing spine syndrome” and eventually get put out to pasture.

Insight No 10 Girthy horses and anxiety or nervousness goes hand in hand. Such anxiety may not be apparent until the horse is stressed. I believe this is one of the most common reasons that horses behave and perform well at home but out of their comfort zone become anxious and or nervous and misbehave. Alleviation of the spinal mobility faults associated with the girth region reactivity usually results in the horse being much more relaxed and better performed away from home. (Of course other causes of discomfort or pain can have similar effects. However it appears that pain or abnormal sensation generated from spinal mobility faults of the wither appear to have a greater effect than in most regions. This may be because the spinal chord of the lower neck/wither region has a large outpouring of nerves from the part of the nervous system responsible for adrenalin production.)

What causes the abnormal sensitivity of the girth and all of these associated problems? Nothing is proven at this stage, but from our knowledge of neuro-anatomy and neuro-physiology, from what we observe clinically, and what we have gleaned from human research, disturbance of the nervous system by trauma appears to be the underlying cause. Scientific investigation of newborn foals has revealed that foals very commonly suffer major trauma, including rib fractures, at birth. It would appear that physically the trauma heals very quickly, but the imprint the trauma leaves in the nervous system can cause spinal dysfunction that produces lifelong imbalance and the multiple consequences we have listed above. The main site of the trauma noted in the scientific studies is the region of the chest corresponding to the widest part of the foal that has to dilate the birth canal of its dam. i.e the region corresponding to the 4th to 6th thoracic vertebrae. Spinal nerves from the vertebrae of this region of the spine service the muscles and skin of the girth region behind the elbow, the superficial muscles of the back of the foreleg and the muscles of the wither under the tree point of the saddle. It also provides nerves for the adrenalin part of the nervous system which forms the sympathetic nervous system chain of the neck. The wither is really the foundation stone of the neck – neck mobility continues down to the 4th thoracic vertebra in humans, and also appears to do so in horses. When the vertebrae of the wither

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are not moving well we effectively have a crooked cornerstone for the neck, and spinal mobility faults and spinal nerve dysfunction appear to develop in the lower neck as a result. Thus the tight and tender shoulders and mild lameness of the affected side.

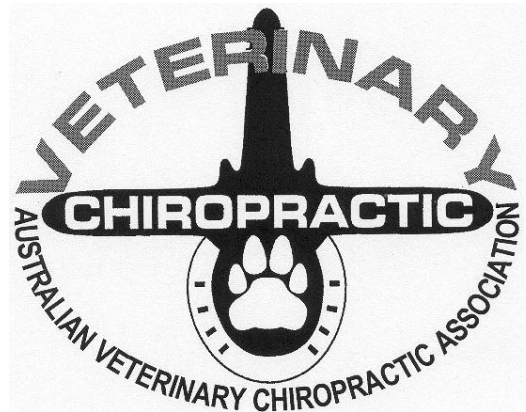
As you will have realised by now, if not before, my passion for girthy horses has led to the uncovering of a very tangled web. Further scientific research is very much needed into what I believe is one of the major and most poorly understood problems of horses.

For more information on girthy horses visit the Australian Veterinary Chiropractic Association website at www.chirovet.com.au

NB Beware - coldbloods and warmbloods do not show girth sensitivity readily. Their behaviour usually gives away the fact that they are suffering before their tissues do, i.e. their skin does not tend to flinch or tighten when it is sore like hotblooded horses' skin does.

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