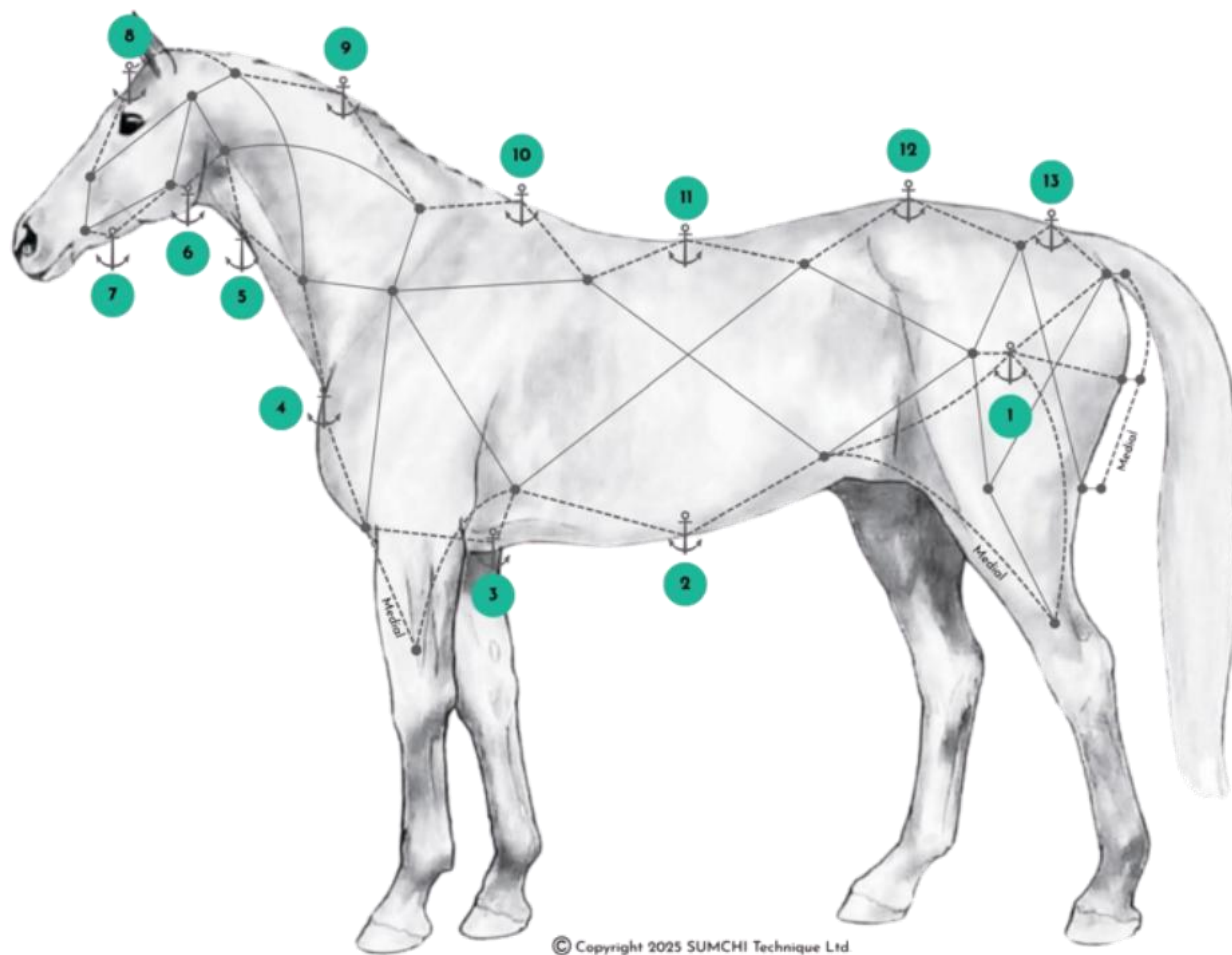




SUMCHI
CREATE WELLBEING

THE EQUINE CONCERTINA





At BSET Academy, we have been researching Nerve Spots and Hock Scars for over a decade. From this research, with the invaluable guidance of Sara Wyche, we have come to identify interesting aspects of the equine collagen matrix.

Today, I will introduce the theories of:

- *Nerve Spots*
- *Muscle Hubs & The Equine Concertina*
- *Natural Horse Wellbeing*

WHAT IS A NERVE SPOT?

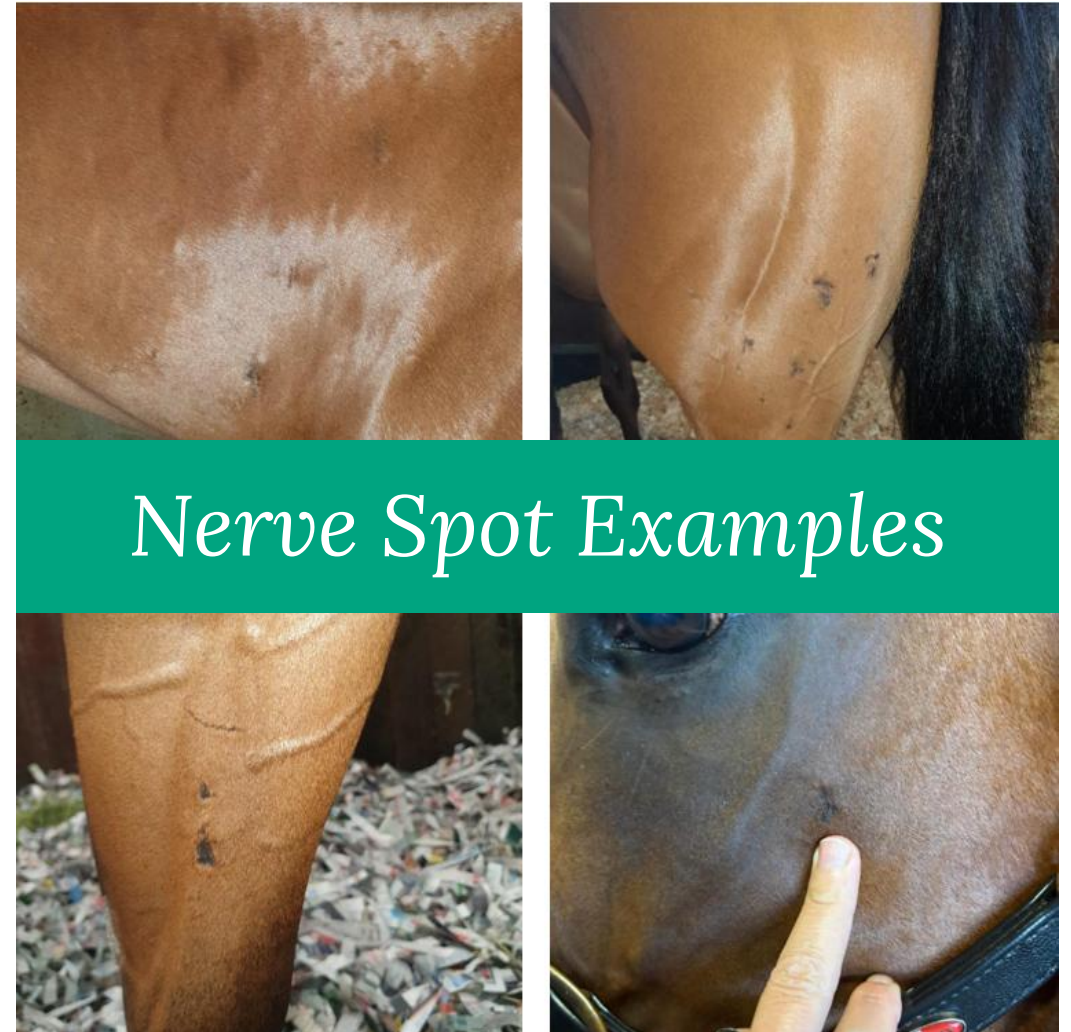
A Nerve Spot is a small, hairless lesion on a horse that is not explained by an obvious scrape or old wound. These circular or thin rectangular patches typically appear over areas of myofascial stress — for example after overextension of a forelimb or hindlimb during racing or jumping. Although often attributed to allergic reactions or dismissed as incidental, Nerve Spots commonly resolve when the underlying muscles and fascia regain normal tone and elasticity. Their patterned distribution frequently follows motor nerve pathways, which is why we call them Nerve Spots. Because their locations align closely with primary fascial transmission lines of the collagen matrix, Nerve Spots can serve as a clinical indicator of local muscle–nerve disruption and as a map of compensatory tension patterns.

We've all seen them - those small, often hairless spots on our horse's body.

We might dismiss them as a rub from a blanket, bugs, a nick from another horse, or a minor skin issue.

But... what if they reflect stress of compensation, stress of a strain in the lower limb, or evidence of hyperextension?

Keep in mind, we have been in a stable with top equine athletes looking at their coats for over 20 years, and most of these horses are not turned out or in contact with other horses.



WHAT IS A HOCK SCAR?

A Hock Scar is a hairless lesion in the area of the terminal end of the Caudal Cutaneous Sural Nerve, which is located in the hock area. The Hock Scar is present on the lateral aspect of the hock.

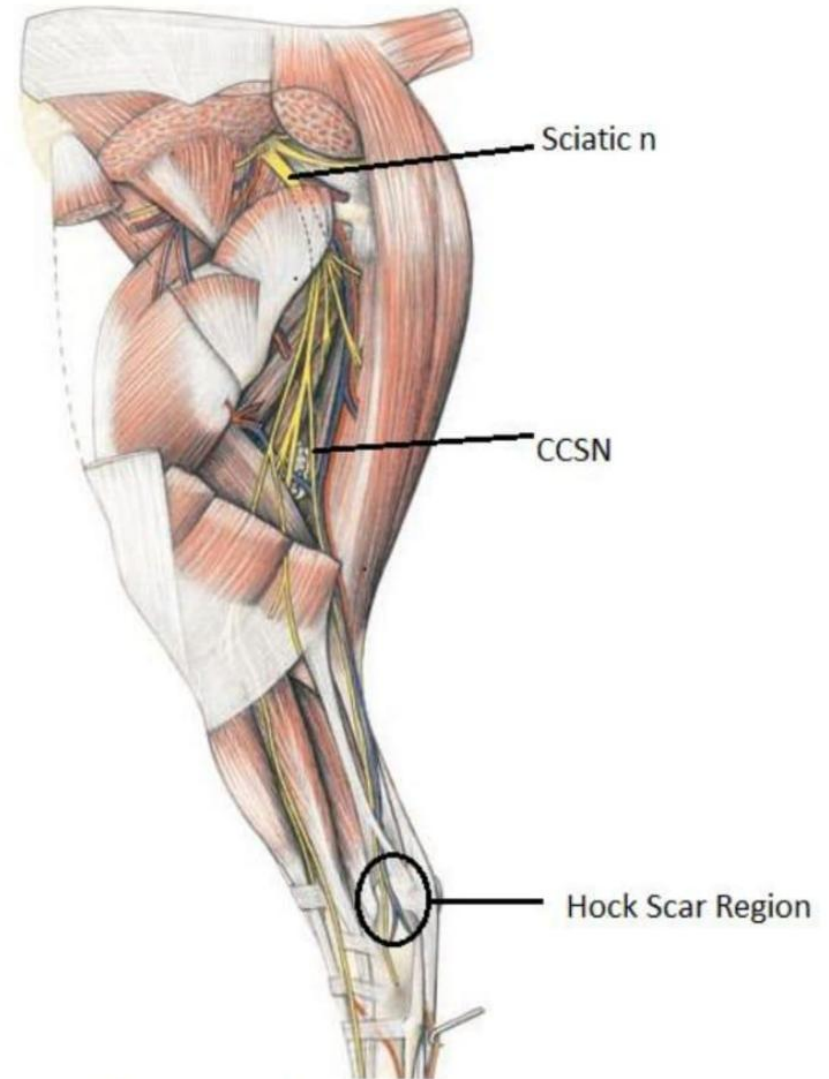


Figure 1: Sciatic & Caudal Cutaneous Sural Nerve

Hock Scar Examples

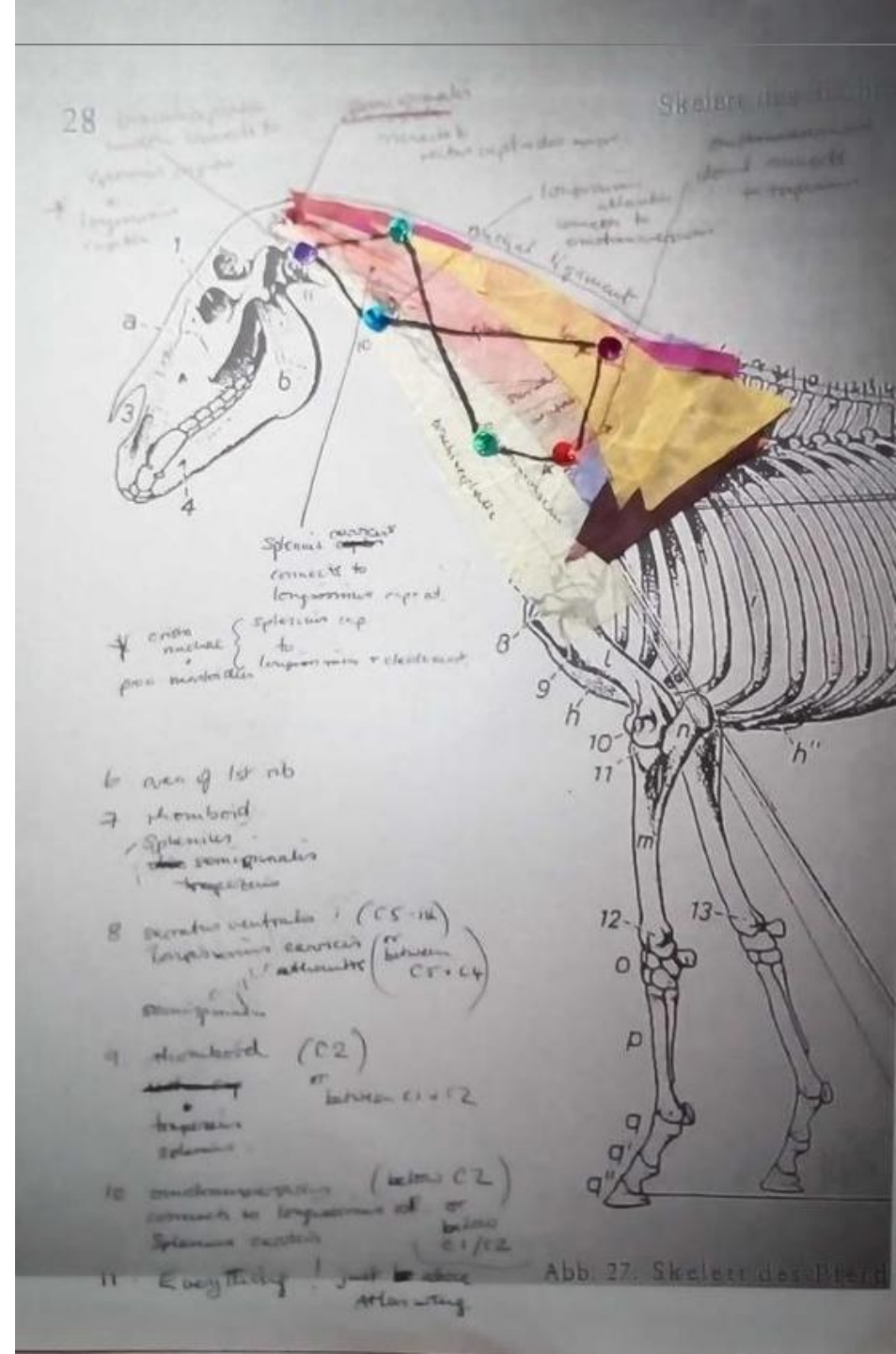


MUSCLE HUBS

Muscle Hubs are locations where two or more muscles overlap and operate in different directions.

“Skeletal muscles are deeply embedded in a matrix of collagen. As opposed to the body skeleton, collagen is the soft tissue skeleton that supports all internal organs and forms fascia, ligaments, and tendons. Muscles are as inseparable from the collagen matrix as fish are from the water in which they swim. Where two or more muscles overlap and operate in different directions, they have the potential to alter the tension of the collagen matrix. This may happen anywhere, but there are certain strategic locations that can be regarded as master points: Muscle Hubs. These hubs are connected by inter-hub tension lines, principal routes by which one hub can influence another.”

- Sara Wyche, 2024



What is a Hub?

A Hub is the centre of a wheel, or the centre of activity. A wheel rotates around its Hub, just as activities are concentrated at a certain place. A Hub is a place of convergence, a crossing or an intersection.

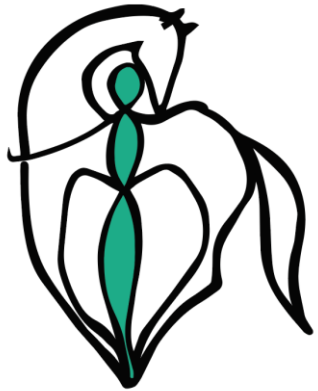
An Analogy of a Muscle Hub

The point about Hubs is that they are points about which there is concentrated or coordinated activity. In the case of the wheel, this activity is motion. When more than one wheel is used in a system, for example, as in a car or cart, they must all rotate smoothly. If one is out of balance, the burden is transferred to the others until each wheel begins to seize. Eventually, the whole chassis becomes distorted until the vehicle is disabled.

From Nerve Spots to the Equine Concertina

After years of discussion and study with Sara Wyche, focusing on the appearance of Nerve Spots and Hock Scars, her deep expertise in Equine Locomotion inspired the concept of Muscle Hubs, ultimately leading to the development of the Equine Concertina. A retired veterinary surgeon and renowned equine author, Sara is based in Lochgoilhead, Scotland.





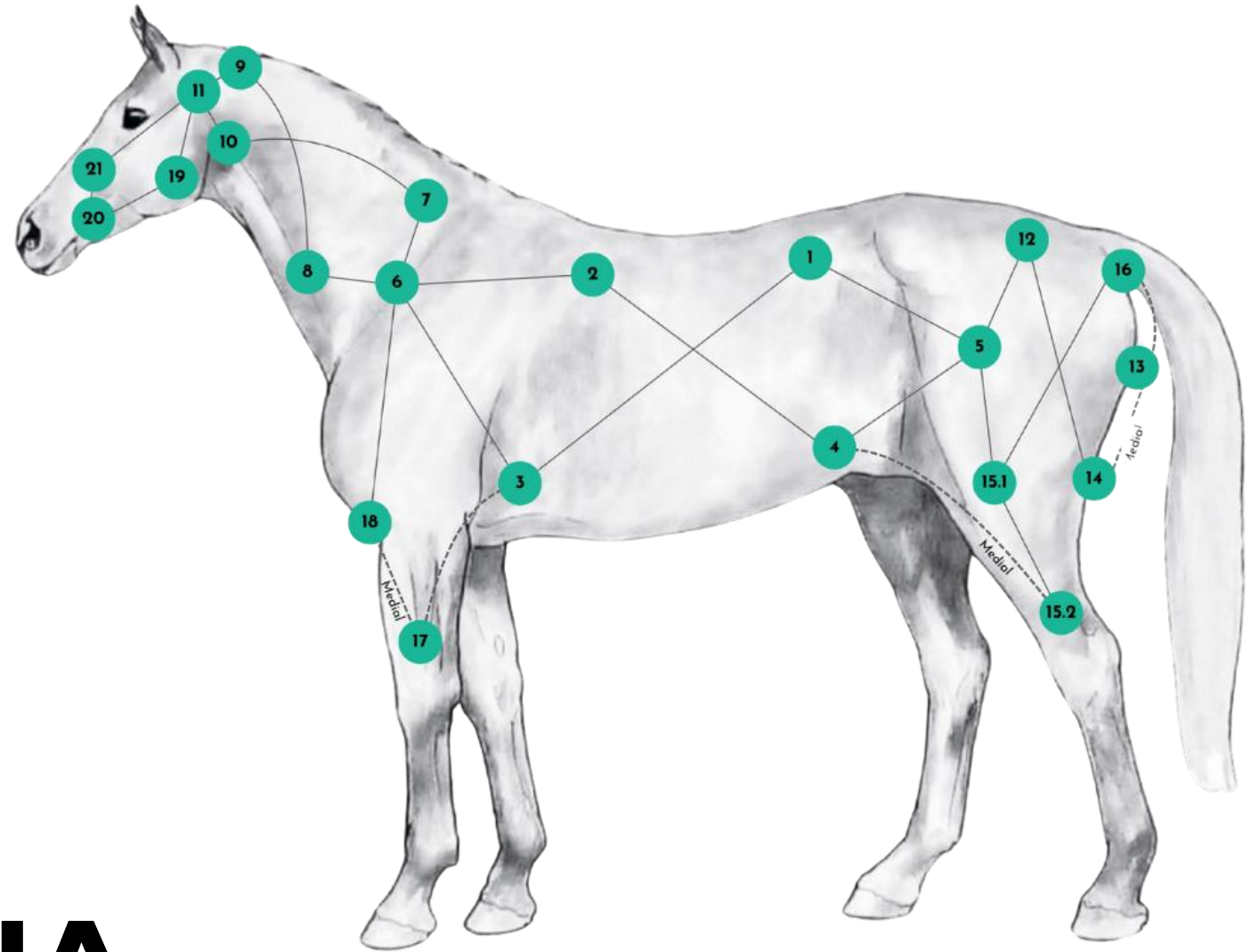
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- 22 Muscle Hubs
- *Interhub Tension Lines*
- 9 Diamonds
- 3 Balance Points of Equilibrium
- 13 Anchor Points

EQUINE CONCERTINA

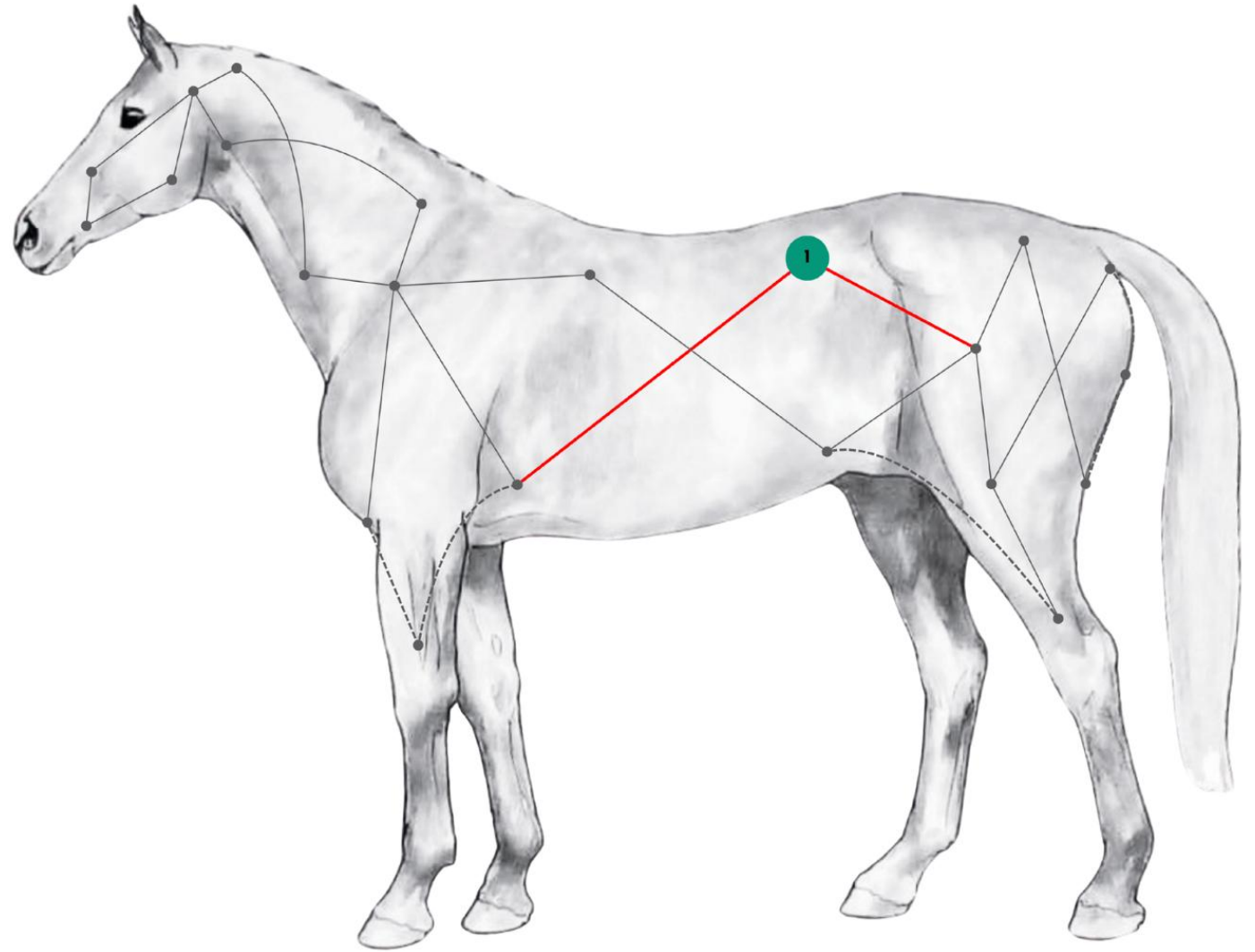
Muscle Hubs



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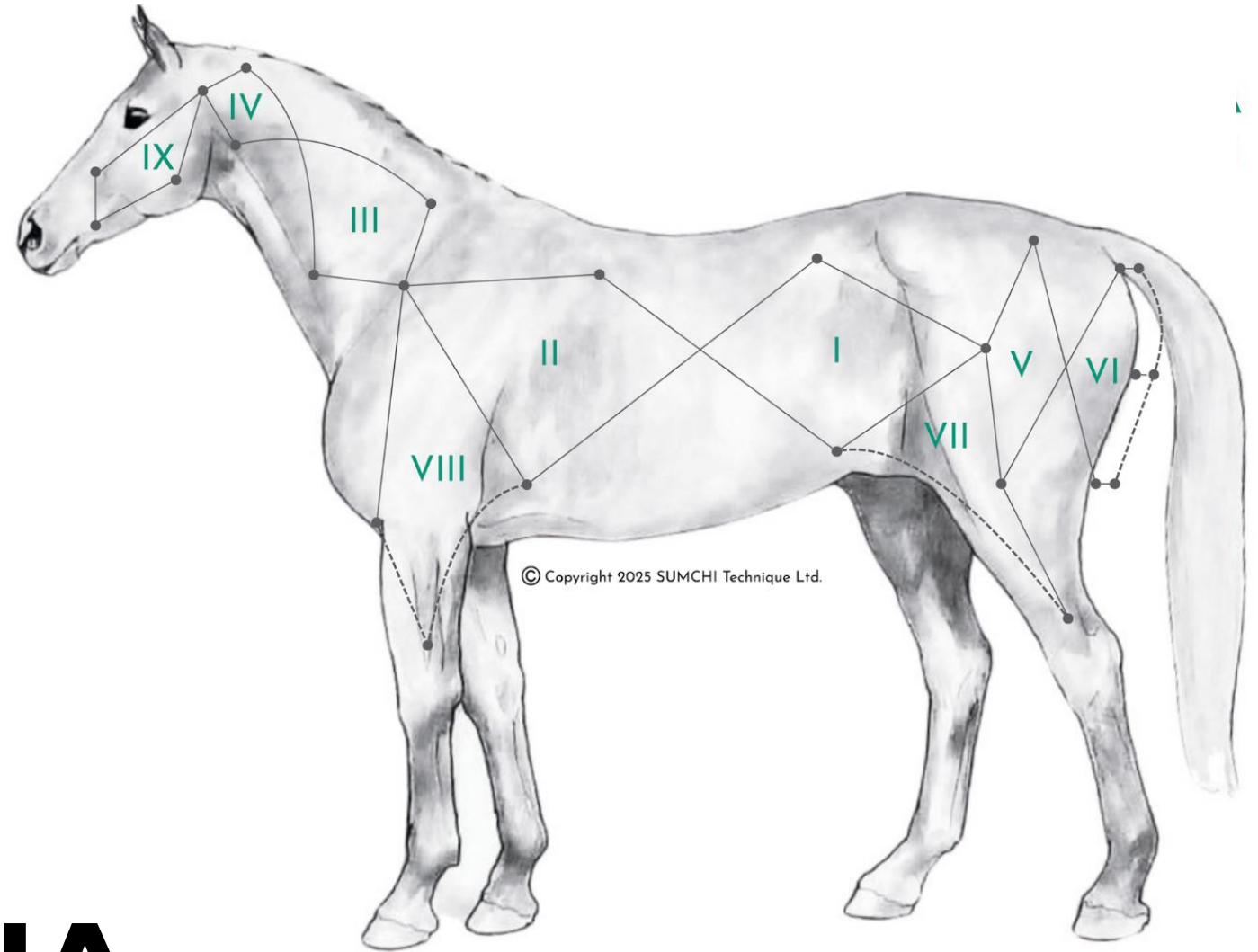
INTERHUB

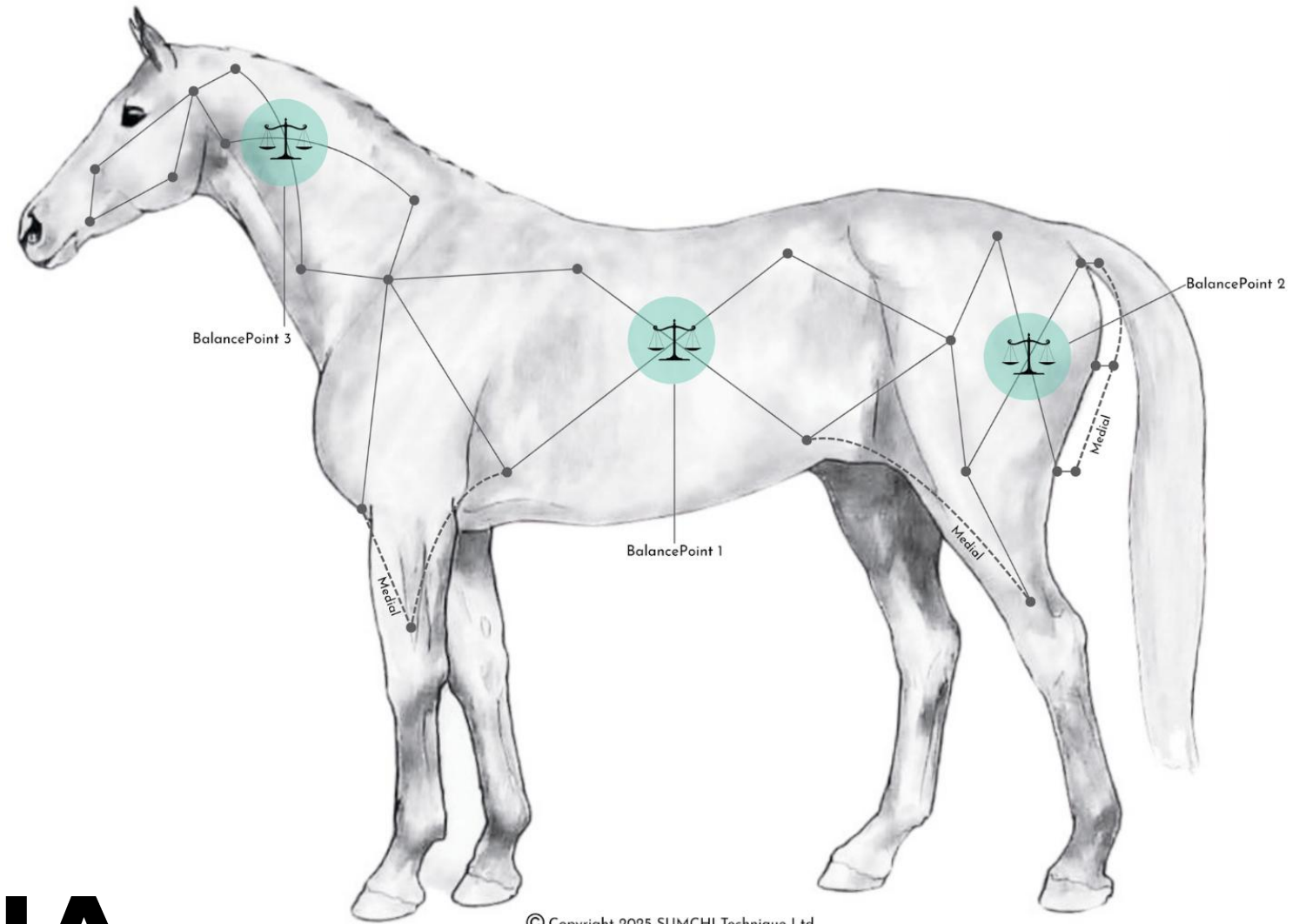
Tension Lines



EQUINE CONCERTINA

Diamonds



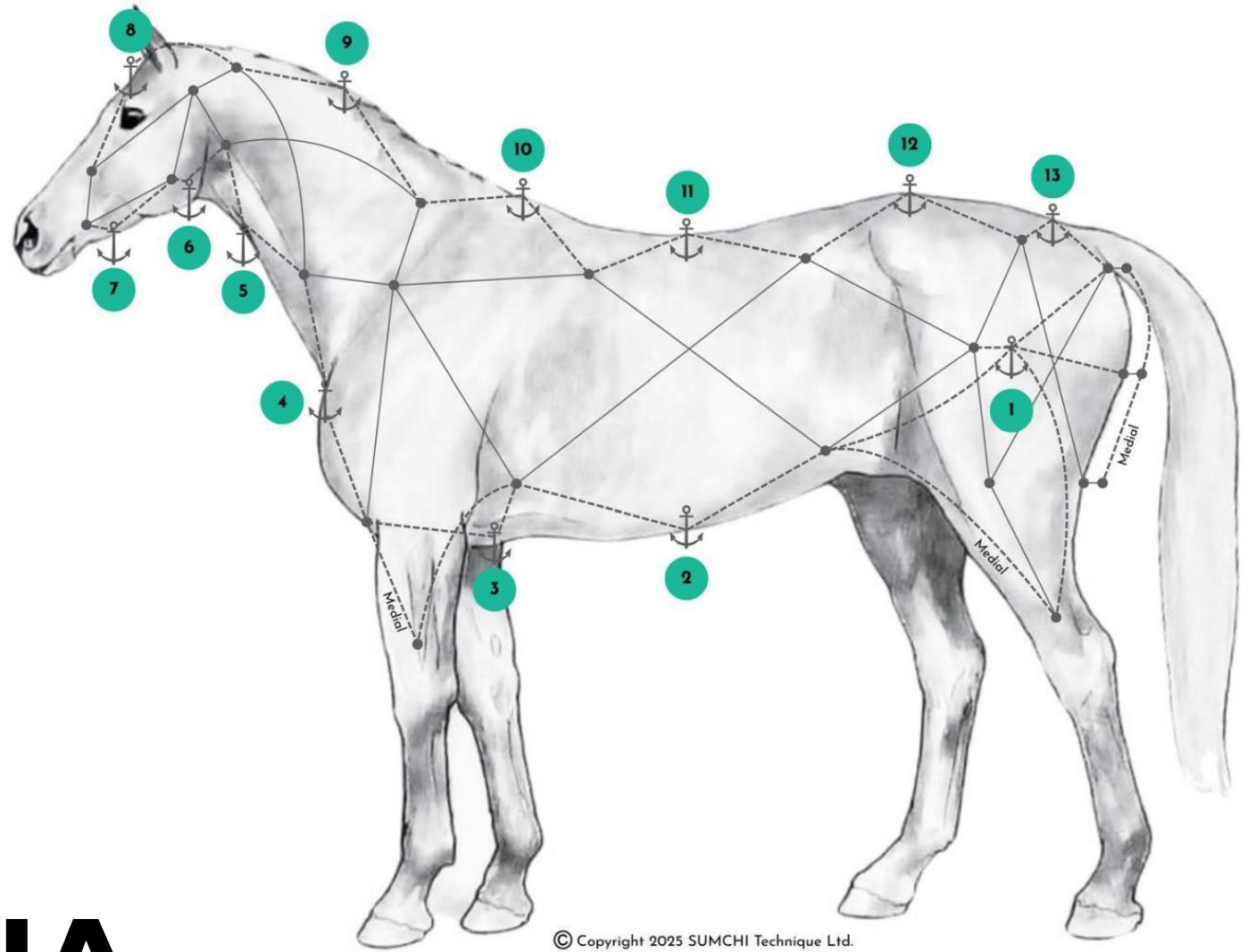


EQUINE CONCERTINA

BalancePoints of Equine Equilibrium

EQUINE CONCERTINA

AnchorPoints

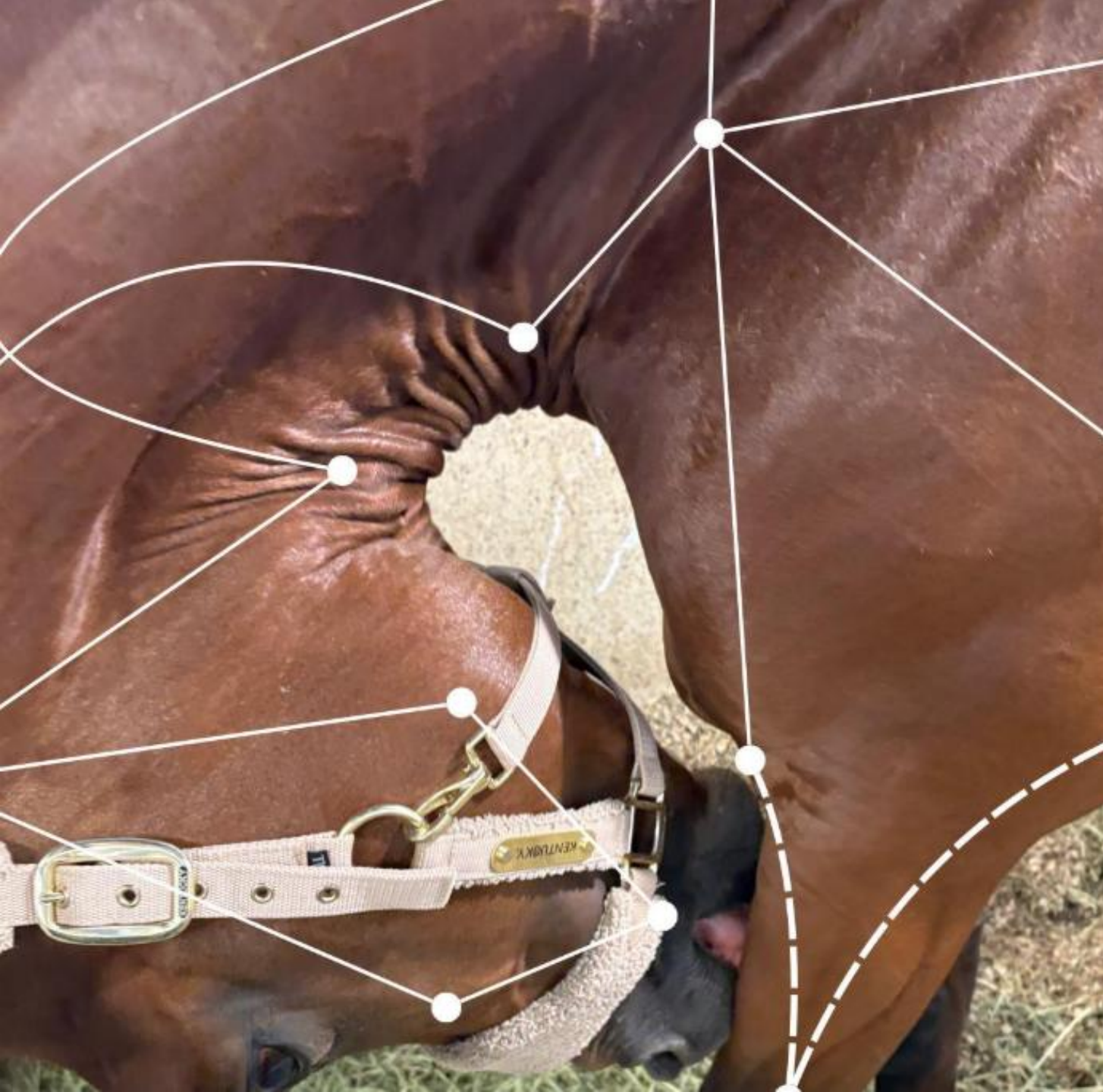




*The Equine Concertina
in Motion*

NATURAL HORSE WELLBEING

- *Self-grooming*
- *Self-poultice*
- *Mutual-grooming*



SELF-GROOMING

Commonly, self-grooming includes behaviours such as tail swishing, rolling, nipping, and rubbing. At BSET, we've expanded this definition to include:

- *Licking*
- *Licking and chewing*
- *Tongue pressure*
- *Upper muzzle movements*
- *Lower jaw movements*
- *Foot stomping*
- *Stretching*
- *Body shakes and self-poultice*



SELF-POULTICE

As our current work is mainly with the stabled horse, We have observed self-poultice with the use of manure. The stables are impeccably clean in the racing stables of the HKJC; therefore, it is easy to notice how strategically the horse uses his manure to apply heat and/or pressure to uncomfortable areas of his body. The areas of self-poultice often, if not always, align with areas of restriction we're finding in their musculoskeletal system.

Mud is also used as a natural self-poultice, probably more as a cooling agent and nature's way of taping, to lift the hair follicle and to change the tension of the tissues. After studying the horse's sophisticated system of Mutual Grooming, we're certain the self-poultice plays a significant role in how the horse naturally maintains its well-being.



MUTUAL-GROOMING

Mutual grooming is how horses express care, reduce stress, and strengthen social bonds. Through rhythmic, synchronized movements, it not only deepens connection but also regulates heart rate, supports tissue health, and balances energy pathways. The SUMCHI framework, together with the theory of Muscle Hubs and Interhub Tension Lines, offers insight into how horses adjust the collagen matrix to create space for these pathways, sustaining their rhythmic impulses.



Through the Lens of

THE EQUINE CONCERTINA

Evaluating self-grooming and self-poultice through the lens of the equine concertina may be useful for breeders to pick up early signs of compensation, and/or developing asymmetry.

Dr Ian Bidstrup, Spinalvet.com.au, research on birth trauma is interesting and possibly links into the evidence of Hock Scars and “prophet’s thumbprint” noticed in young foals.

BIRTH

Trauma

by Wendy Elks with
Dr Ian Bidstrup

Photo by Carol Willocks

Equine research has allowed the development of new concepts in the link between chest and pelvic trauma at birth, and pain, behavioural and performance problems of horses.

For humans, giving birth is a momentous occasion; for horses, it's a process mostly performed alone and unassisted, in their natural environment. The 'expectant' horse breeder may await the imminent arrival of a four-legged 'baby' with foaling stall and intercom at the ready, only to find that the mare has given birth in the paddock during the night. In the morning the foal, with extraordinary capability, stands beside its mother, drinking and sturdy, ready to embrace life. The brief trauma of birth is over. Or is it?

A growing body of clinical experience and scientific research indicates that the physical trauma of birth can sometimes profoundly affect a foal's physiological development and consequently its future performance. Horses suffering from the unresolved effects of birth trauma may be those often referred to as 'saddle shy', 'girthy' or 'cold-backed'. A horse may be considered piggy, difficult or nasty, when in fact the animal is responding to chronic pain and discomfort, which goes back to the birthing process. Many years of observation and successful treatment of spinal conditions by Dr Bidstrup and his colleagues indicate links between trauma suffered at birth with a complex range of conditions such as girthiness and one-sidedness in riding horses.



Birth trauma, resulting in long term spinal dysfunction of humans, is well recognised by chiropractors, osteopaths, some medical practitioners and physiotherapists, and most of these practitioners advocate early intervention to rehabilitate babies from the damage birth can cause. Similar trauma can occur to equines during foaling. Most of the time, in humans and horses, the damage heals quickly. But reasonably frequent spinal dysfunction appears to remain, which if undetected and uncorrected can lead to chronic conditions that the body learns to accept as normal. Not life-threatening, they nevertheless set the horse up for problems and difficulty when it comes to being ridden.

Birth trauma occurs because of the enormous pressure exerted upon the foal as it passes through the birth canal. While the skeletal frame of an unborn foal is supple and designed to withstand the journey of birth, it is well-recognised that virtually all foals undergo some damage during transit through the birth canal. As protuberances such as the foal's rib-cage at the level of the shoulder and wither are subject to the greatest forces,

Continued

HUBS ARE THERE FOR A REASON

*To maintain the integrity of
the collagen microkeleton*

However, when muscles begin to support postural adjustments, they forfeit elasticity. The tissue becomes dehydrated, tense and dense.

Therapy consists of mobilising, energising, stimulating blood and lymph circulation, and promoting drainage of waste products.

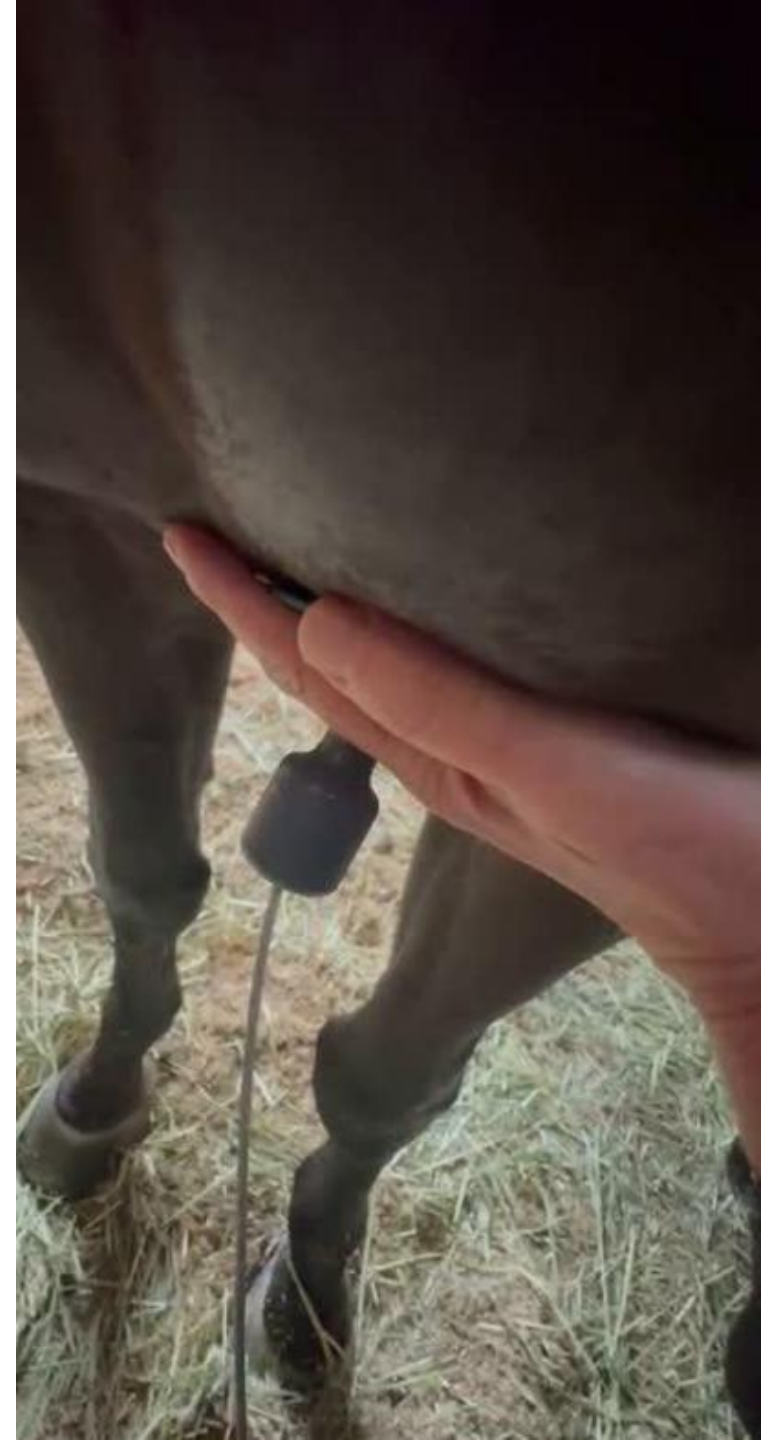


Association of Accredited Practitioners Pty (Ltd)

EQUINE TRANSEVA TECHNIQUE (ETT)

ETT is a technique that uses the Winks Greene Transeva- an apparatus originally designed by the late Sir Charles Strong. The technique is rich in history and has survived over time due to its unique pulse and mobile handpiece.

The Transeva's pulse creates rhythmic contractions, the ETT Practitioner assesses the state of muscle tone under contraction and adjusts the dynamic current accordingly to bring the muscle to optimum function.





SUMCHI
CREATE WELLBEING

SUMCHI TECHNIQUE

SUMCHI Technique developed from our ETT work and the observation of Nerve Spots being present in areas of the skin lacking correct contractility, healthy myofascial tension and therefore, lacking optimal energy pathway transmission of and within the collagen matrix.





SUMCHI STROKES

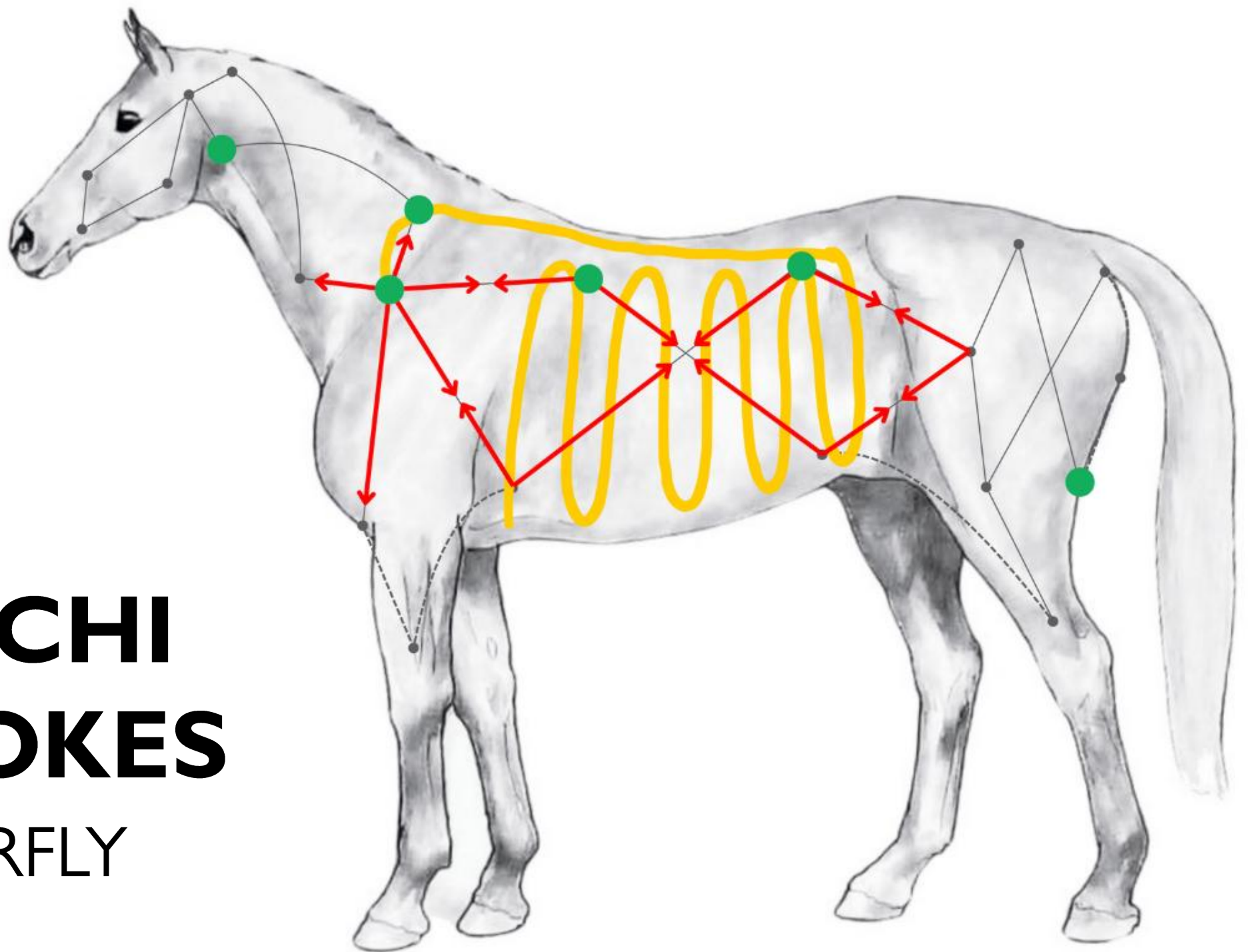
and their influence on the Equine Concertina

SUMCHI Strokes are strategically designed movements over the horse's body to interact with Muscle Hubs and ITHL to improve the function and balance of the collagen matrix.

This allows for healthier function of the skin, circulation, nerves, fascia, muscles, myofascial kinetic lines and ultimately the channels of the life processes. These are all vital to ensuring well-being, smooth movement and optimal performance of the equine.

SUMCHI STROKES

BUTTERFLY



THANK YOU

For Listening

After tea, we will do a short demonstration to introduce the ETT and SUMCHI.

I look forward to answering any questions and hearing your input.

Reg No: CSVP24/I7700