



A WINDOW INTO THE WORLD OF SUBCLINICAL ORGAN DYSFUNCTION

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Motion palpation of all the joints of the body tells the unique story of that horse. It gives a clue as to where the body has already been and where it is going.

Osteopathy is a revolutionary and new approach to 'diagnosis' of hidden organ challenges in the body. In all my years of holistic studies I have never found anything else that is so consistent and accurate in determining what is really going on in the body. Acupuncture channel diagnosis can be helpful however with differences of opinion as to what acupuncture points mean organ-wise and where they are actually located I personally do not find it a reliable system.

Visceral osteopathy and its system of diagnosis are grounded in the precision of anatomy and the autonomic nervous system. As long as the equine osteopath knows how to accurately count vertebrae and has decent motion palpation skills then with a fair level of confidence one can get a very good idea of the story of the body. I love getting lameness cases that stump other equine veterinarians because I know that most of the time some underlying visceral issues are related to immobilities of the musculoskeletal system and lameness somewhere in the body. And I love the level of empowerment osteopathy gives me to discover that a horse is quietly dealing with an organ challenge such as a stomach or duodenal ulcer, parasitic arteritis or hindgut acidosis. Many horses are struggling with issues that are under the radar of the conventional veterinarian and even the veterinarian trained in holistic modalities such as chiropractic, acupuncture and homeopathy.

BASIC RULES OF EQUINE VISCERAL OSTEOPATHY

1. Organs/internal tissues affect afferent nerve flow of the autonomic nervous system.
2. Changes in afferent nerve flow lead to specific patterns of immobility in the spine, pelvis and shoulder blades.
3. 50% (up to 80%) of musculoskeletal restrictions can come from a root visceral cause.
4. To achieve and maintain long term freedom in the body and optimal performance, visceral causes of spinal and pelvic restrictions MUST be addressed.

VISCERAL 'DIAGNOSIS' VIA PALPATION OF THE THORACOLUMBAR SPINE

I call this area 'organ land' as it is a treasure trove of information about what may be going on internally for horses and what may be at the root of some of their most basic musculoskeletal problems.

A '3 in a row spinal pattern of fixation' is a visceral pattern. ([watch video](#))

The only caveat here is that all three vertebrae are fixated in a side-bending pattern laterally to the SAME side and all 3 must be in extension or all in flexion. Otherwise there are local fixations patterns and are not caused by autonomic nerve changes from organs. This is why competence in motion palpation of the spine is critical as well as being accurate in counting which vertebrae one is palpating.

This system is not 100% perfect due to a complex autonomic nervous system and visceral osteopathy continues to evolve however to date what has been discovered has been validated in the treatment of thousands of horses.

Examples of common visceral spinal patterns:

- Th 7 – 10 liver
- Th 12 – 14 stomach
- Th 13 – 15 duodenum
- Th 15 – 17 adrenal glands
- Th 17, 18, L 1 kidney(s), ureter
- L 1 – L 3 pelvic viscera (ovaries/uterus/bladder, castration scar/bladder/ductus deferens)
- Th 17 – L 3 pelvic viscera (as above) AND ureter L 4 – 6 ileo-cecal junction
- L 4/5 – 6 subclinical hindgut acidosis

If I find any kind of sacro-pelvic restriction (which is almost all the time) then the next question I always ask is....is this a local mechanical problem or is there a root visceral cause? Spinal patterns in the thoracolumbar area tell me the answer to that question.

**** Note to chiropractors – if you do adjustments of these sacro- pelvic and spinal subluxations but the root cause is actually visceral....then the restoration of movement from the manipulations is very short-lived, often minutes, and the restrictions are back. If the visceral problem is addressed, either immediately if it is a mechanical restriction, or over time with proper treatment of the organ, then the restrictions actually go away by themselves (since autonomic nerve flow has changed) and sometimes require one treatment and then the restrictions do not return.**

COMMON VISCERAL DISORDERS DETECTED VIA OSTEOPATHIC EXAM

Pelvic viscera (incidence = 40+ %) (L 1- 3 (also TH 17/18 if ureter is involved), and rotation of sacrum and one/both ilium bones)

Geldings - gelding scar/spermatic cord adhesion, or ureter or bladder issues

Mares - mechanical restrictions in ovaries and/or uterus and/or ureter and/or bladder (fascial restrictions of mesovarium/mesosalpinx/mesometrium and ligaments of bladder)

Stomach (incidence = 50 + %) (T 12 - 14, and often left scapular downslip/flexion disorder) -most commonly would be an ulcer (osteopathic exam does not ensure there is an ulcer, only that the autonomic NS is saying there is something wrong or 'off' with that organ).

Duodenum (incidence = 50 + %) (T 13 - 15, and often left scapular downslip/flexion disorder) this could be an ulcer but can also be an impairment of digestive enzymes arriving in the duodenum from the pancreas and an overall disturbance of duodenal function.

- vast majority of horses with verminous arteritis also have a pattern in the spine indicating a
- challenge with the duodenum. The working theory here is that the vascular anatomy of the gastro-intestinal system leaves the duodenum in a vulnerable way with vascular congestion and disturbance caused by the arteritis. Several weeks after the deworming protocol has been completed at least 50% of horses no longer have the pattern present for the duodenum.

Worm aneurysm/verminous arteritis

[\(visit the website for more information\)](#)

- larvae of the large strongyle worm spend part of their life cycle in the cranial mesenteric artery inciting inflammation and fibrosis and thus changes to the ANS (sympathetic chain)
- causes fixations in extension, from Lumbar 6 to Thoracic 12, and on the right side of the back 95% of the time, (and an ilium if more advanced case)
- these are the horses with obvious right- sided stiffness in the back and not wanting to bend to the right....this is a unique “13-in-a-row spinal pattern”
- there is a huge spectrum to this very common but insidious problem....everything from the high level sport horse with mild right-sided back stiffness to the very obvious parasitized horse with a pot belly and a back that feels like ‘cement’ on the right side.....routine deworming is not often enough to adequately deal with this problem, many cases are ‘subclinical’ and only detected via osteopathic exam (or trans- rectal ultrasound), fecal tests can be negative despite presence of larvae in the arterial system.

Kidneys (incidence = 20 %?) (T 17, 18, L1....sacrum and ilium on same side)

-fascial restrictions of peri-renal fascia, kidneys lay on psoas muscle which attaches to the ilium; a kidney can get ‘congested’ due to complex vascular relationships regionally and are affected by abnormal tension in the ureter

Hindgut Acidosis (clinical/sub-clinical) (incidence = 40+ %)

- Large quantities of grain or fructan-rich grasses pass through as undigested starch to the large intestine, the starch is rapidly fermented causing elevated levels of lactic acid (so pH drops....below 6.5)....the increased acidity kills beneficial fibre-digesting bacteria allowing pathogenic bacteria to proliferate
- in the wild horses eat up to 18 hours a day and walk 10 miles a day...
- a domestic horse has a vastly different lifestyle and constant negative challenges to the gastrointestinal system
- pattern of L 4 - 6, sacrum and one or both ilium/pelvic bones....right pelvic bone is more commonly blocked due to location of the cecum on the right side. This condition can affect their comfort in athletic endeavors and can be a precursor to colic or colonic ulcers or both. In these cases you will also see a distended abdomen (not related to parasites or obesity), the diaphragm and 18th rib further caudal than normal, repetitive rings or grooves on the hooves and increased warmth in the coronet area on all four feet.
- hindgut acidosis is a common precursor to colonic ulcers which can have an incidence of over 40% in performance horses; many horses with colonic ulcers also have gastric ulcers

Ileocecal Junction (L 4 - 6, sacrum and one ilium/pelvic bone)

- this junction that works somewhat like a valve can be in chronic spasm with decreased function, but not enough to cause colic such as impaction colic....often discovered in cases of hindgut acidosis and on palpation is hard and feels like a tumor (tension goes away with treatment)
- Many horses have more than one visceral issue going on at one time....and these horses are more likely to show up with a lameness or performance issue due to the cumulative effect of all these restrictions on the whole body and the

adaptations in other joints and soft tissues that follow. However even just the presence of a gelding scar or restricted ovary (causing sacropelvic restrictions) will cause performance issues (rather than lameness) that many riders and trainers commonly complain about which is problems with fully using and engaging their hind ends.

TREATMENT OF COMMON VISCERAL PROBLEMS

** horses with these problems are often asymptomatic, or they manifest more in restrictions in the musculoskeletal system **

PELVIC VISCERA – mobilization of fascial restrictions/adhesions of ovaries/uterus/bladder/ureter/ductus deferens/castration scar

- other possible problems such as tumors, ovarian cysts and kidney or bladder stones would need to be addressed non-osteopathically (either holistically or conventionally)

VERMINOUS ARTERITIS / WORM ANEURYSM

There is a specific deworming protocol that involves sequential and strategic use of fenbendazole and Quest dewormers in a concentrated time period that serves to completely free up the right side of the back that was affected by the autonomic nervous system. It seems this amount of deworming is counter-intuitive to a more holistic approach however after doing it on over 700 horses I can say unequivocally that the horses are healthier, happier and more free in their bodies after this deworming. *The protocol is an addendum at the end this document.

STOMACH DISORDERS

There are numerous treatments for ulcers besides drugs like Gastrogard....these include many herbal formulas, green clay, SUCCEED, EquiPride, Stomach Soother (papaya product), aloe products and the list goes on.

DUODENUM DISORDER

Treatments for the duodenum can be frustrating since what successfully treats stomach ulcers does not work 100% for duodenal issues.

Succeed and EquiPride (and Equine Choice in Canada)

Are the only products that consistently work for duodenal issues...I am always on the lookout for products that support the microbes in the hindgut as they also seem to support the foregut (stomach and small intestine).

SUBCLINICAL HINDGUT ACIDOSIS

A sodium bicarbonate buffer such as EquiShure is extremely helpful in modifying large intestinal pH and thus helping to restore healthy microbial populations.

- use of yeast such as *Saccharomyces cerevisiae* helps increase the fermenting activity of hindgut bacteria, increases fibre digestibility and improves nutrient absorption
- use of prebiotics stimulates growth of healthy bacteria and stops pathogenic bacteria from binding to the lining of the gut....prebiotics are nondigestible food ingredients (sugars) such as FOS (fructo-oligosaccharides) and MOS (mannan oligosaccharides) EQUINE CHOICE PREBIOTIC + PROBIOTIC provides this.

ILEOCECAL JUNCTION

Through rectal palpation ones that are in spasm can be stretched or massaged open.

TAKE HOME MESSAGE

- You will miss more by not looking than by not knowing....
- (Chiropractors) Is the pelvis still free at the end of your treatment?
- HALF the causes of immobility of the pelvic and sacral bones are coming from visceral causes
- Most horses have gut issues somewhere, and some horses have them everywhere.....
- All domestic horses have a high probability of some gut imbalance

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