

THE BENEFITS OF OSTEOPATHIC ARTICULAR BALANCING FOR THE EQUINE ATHLETE

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Introduction

The Benefits of Osteopathic Articular Balancing for the Equine Athlete

What is Osteopathic Articular Balancing? Does it work? And if so, how? These are often questions asked by potential clients and certainly by myself as I began my journey into equine osteopathy. Sure, the horse relays information back to the rider, trainer, osteopath be that be relaxation, soundness, better movement, or improved results but as we travel through this paper, we can see fact-based results that back up the positive effects of osteopathic manual therapy as a treatment that can greatly benefit the performance of the equine and human athlete alike. There are studies within the paper showing the crossover between the two sets of athletes, this can only enhance the art of osteopathy and Osteopathic Articular Balancing, as the human athlete can inform others of the positive effects of osteopathy, creating a well-being of body and mind.

The origins of osteopathy are also touched upon as this is the very foundation of what Osteopathic Articular Balancing is built upon. The paper will also highlight the natural benefits of osteopathy as opposed to allopathic/traditional medicine which in certain circumstances can be detrimental to health and recovery.

The Origins of Osteopathic Articular Balancing

The origin of Osteopathic Articular Balancing is an assessment and treatment technique founded by Professor Stuart McGregor, iloveveterinary.com> blog The technique is based upon the teachings and philosophy of Dr Andrew T Still and John Martin Littlejohn.

Dr Still was the founding father of osteopathy 1874 after becoming disillusioned with traditional/ allopathic medicine he himself being a physician. A combination of different factors led to his need to find osteopathy. The loss of three of his own children to spinal meningitis, the unsanitary conditions for surgery often leading to infection and death and also the use of opium, whiskey, castor oil and arsenic as medication gave him the need for answers and for a better way forward, so he began to study the anatomy of the human in detail. Osteopathy coming from the Greek words bone “Osteon and “Pathos” for suffering. He opened his first school of osteopathy in Kirksville Missouri in 1892 and published the first of four books in 1897 Autobiography of Andrew T Still. Philosophy of Osteopathy (1889) The Philosophy and Mechanical Principles of Osteopathy (1902) Osteopathy, Research and Practice (1910) www.atsu.edu A T Still University.

John Martin Littlejohn was a student of Dr Still having moved from Scotland and Northern Ireland. He moved to America for a warmer climate due to illness from damp climates. Having been impressed with Dr Stills methods after travelling to Kirksville for a treatment, he became a student of Dr Still he progressed to be a lecturer and Co-founder of osteopathy in his own right and took his newfound knowledge to London, opening the first school in London 1917 and other parts of Europe and then back to the US. classical-osteopathy.org>John Wernham, DO

Professor Stuart McGregor is the founding father of Osteopathic Articular Balancing (OAB) and is regarded as one of the first osteopaths to transfer his human osteopathic skills to horses. (animalosteopathyworldwide.com) Professor McGregor qualified from the well renowned European School of Osteopathy in 1984 which originally opened in Paris in 1951

then relocated to London in 1965 and then on to its current location Maidstone Kent in 1974.

www.eso-ac-uk

Professor McGregor was the first person to pen a dissertation on the subject of equine osteopathy “The Principles of Osteopathy Applied to the Horse”. Professor McGregor has taken his passion of anatomy and taught the theory and manual therapy of equine and canine osteopathy and in particular Osteopathic Articular Balancing for thirty-five plus years as well as running a practice that treats animals at the top level.www.ocauk.org

What is Osteopathic Articular Balancing

Osteopathic Articular Balancing is used as an assessment method and as a treatment. When using Osteopathic Articular Balancing as an assessment method there is an expected range of movement within a joint, limb or muscular structure. The osteopathic and Osteopathic Articular Balancing teachings and philosophy ask the practitioner to find health and not disease or restriction. It is common to use both sides of the horse as a guide to symmetry. Jenks (2010) If there is a restriction or imbalance found this is often referred to as a somatic dysfunction, meaning it can affect the balance of the whole animal. Brooks (2010) this imbalance will cause an altered function of the muscular system, causing a lack of blood flow, inflammation, muscle spasm, restricted movement, pressure on other parts of the body by trying to transfer the pain, Stashak. (2002) This in turn will send messages to the brain via the nervous system and lameness will follow. osteopathy.org.uk (2024)

The equine athlete is looked upon as a locomotion machine, with each part doing its job to maximum effect. Jack Meagher (1998). The heart being the engine, the lymphatic system and venous being the oil, the tendons, fascia, ligaments, and muscles being the belts pulleys and

cogs that make movement happen and the brain and the nervous system being the computer without which nothing works. Elbrond and Schulz (2015). All of elements must work to get the maximum performance, if one-part malfunctions it effects the rest of the systems and structures trying to compensate for the broken or injured link. Saute (2021)

One of the important factors of Osteopathic Articular Balancing is to promote the movement of bodily fluids such as blood and lymphatic fluid around the body, this movement aids circulation and drainage if there is a restriction this cleansing mechanism breaks down and effectively the oil change discussed earlier is limited. This process is directed to the heart and lungs to get fresh oxygen Bromley (2007) it is aided by the frog, digital cushion, collateral cartilage, venous plexus, and the non-returnable valves in the veins. Curtis (2002)

Osteopathic Articular Balancing as a treatment

Before a treatment has commenced there will be a consultation / case history carried out for the horse about to be treated, there will be a series of questions asked to gain a picture of the animal in question and this is also a perfect time to answer any questions or concerns the owner may have prior to treatment. Questions will often be age, past treatments, veterinary consent, are ringworm or strangles present, expectations of the animal post treatment. Pusey and Brooks (2010)

A static assessment will be carried out to look at the horse's conformation, muscle tone, evenness of anatomical points as a guide to symmetry, weight in relation to that particular breed/type, any lumps or abnormalities will be noted and asked if noticed previously, foot size and evenness, special shoes and if so, why? as in bar shoes, wedges, pads etc. Curtis (2002)

A Dynamic assessment will be carried out, Williams (2019) walk away to look at the hind quarters and foot fall pattern and back to look at the head, shoulders and foot fall of the front feet, a side view will show foot flight, length, and height, are they flowing and a similar height and if not why? A long turn both ways will show flexibility and then tighter will add more pressure to the flex showing tightness if present, the same process is carried out in trot on a range of surfaces if required this change in surface exaggerates any unsoundness by the joints working harder, a canter on the lunge or a ridden assessment maybe required if asymmetry's only present when ridden to get a true reading from all angles. Sommerville (2014)

When using Osteopathic Articular Balancing as a treatment, the principles of osteopathy must come to the fore," treat the cause not the symptoms" Still (1902) reminding the practitioner that the body must be treated as a whole as one part relies on the other for maximum efficiency. Still (1902) As Osteopathic Articular Balancing is commenced there has to be a feeling and an awareness of what structure and its function is being addressed, the saying listen to your hands rings true as it's the feel of movement that has the desired effect. The practitioner will have an intent to free the structures being worked upon with a positive mind for a positive outcome. This putting the joint through a range of movement or using a limb as a lever to free the surrounding structures awakens the muscle, fascia, tissues, and related nerves, it promotes the circulatory flow and has a positive effect on the rest of the body and mind. The title of this method of osteopathy for animals says so much about what it does and aims to achieve. The word "balance" really does capture what the equine is all about in its perfect form. Balance of motion and soundness creating a balanced mind of a happy horse.

Osteopathy is very beneficial when used the rehabilitation of an injury. Brooks (2010) It is a useful way to get movement into any injury site to promote health without weight bearing and to aid strength and conditioning by keeping the muscles of the effected limb strong and

supported and also the supporting limbs loose as they are quite often under strain due to taking the weight of the injured limb, the benefits of this have been seen through swimming. Bromley (1993). If the osteopath has a good knowledge of horsemanship, they will be aware of the benefits and importance of what exercise is beneficial to the horse after treatment or injury. That may be in hand or ridden, a plan can be drawn up to help the owner/trainer with the best way forward for that particular animal. To have a team ethic and have the support of other professionals such as veterinarians, farriers and saddlers is always the best way forward for all concerned parties in rehabilitation.

Similarities between the human and equine athlete in relation to osteopathy

There are often studies undertaken between the human and equine athlete as both sets of athletes push the boundaries in training to achieve optimum results in competition.

www.physoc.org There is an extremely fine line between the maximum of performance and the opposite of that which is a breakdown of a particular structure.

BMC physiology (2011) Certain studies undertaken in the equine world have been extremely valuable in the research for tendon regeneration for human athletes after injury. Spaas et al (2012) It is this crossover between the equine and human athlete that magnifies the importance of osteopathy and Osteopathic Articular Balancing as an important tool in maintaining the wellbeing of the athlete whatever the species. The most prestigious athletic event in the world is the Olympics, which is the pinnacle of sport for horses and riders alike. Osteopaths have played a vital role in keeping both athletes performing to the best of their ability since 1992. www.fionapussey.co.uk blog. (2021) In the London Olympics of 2012

there were 900 osteopathic consultations which was quite impressive considering there was only one osteopath per shift. In the 2016 Rio Olympics there were 1100 consultations oiaalliance.org>Olympic games. Rob Hall. (2018) There is pattern that as each Olympic games comes around osteopathy is becoming more popular as a treatment and this exposure furthers the art of osteopathy both for humans and animals. The equine community, although vast and worldwide, is a very close-knit community and hearsay goes along way, so the more times osteopathy is talked about as a treatment for horses or riders the more this promotes the art of osteopathy. Studies are constantly being carried out to validate the effectiveness of osteopathy as a treatment within the equine world. One such case based on the study of 51 horses showing lameness or a change in gait, showed the horses that had failed to improve for veterinary intervention or a lack of diagnosis in some cases. When these horses were assessed by osteopaths, they showed signs of pain in the neck and back showing signs of somatic dysfunction, tenderness, lack of muscle tone, and change in confirmation all lead to this diagnosis. After treatment 46 of the cases improved. This would suggest that subtle signs of stiffness and muscle pain can be overlooked as a sign of lameness and more so overlooked as the primary source of lameness. Colles-Nevin-Brooks (2014) these studies are invaluable in gaining fact-based evidence. The different equine disciplines put strain on different parts of the body. Hourdebaigt (1997) The osteopath's ability to assess and treat the horse as a whole can address a problem before it occurs.

Why Osteopathic Articular Balancing as opposed to allopathic medicine.

There are many instances where allopathic / western medicine is necessary or can be used in conjunction with osteopathy but there are certain cases where drug-based treatments can have

a detrimental effect on health. This is when osteopathy comes into its own to take away pain and promote health without the need of drugs. The side effects of non-steroidal (NSAIDS) drugs have been shown that the blocking mechanism within these drugs can disrupt the horse's stomach, intestines, and the inner lining of the intestinal tract. Stashak (2002).

Although prescribed doses are generally given, studies have shown in certain horses that may have undiagnosed gut problems that the drugs can make the conditions worse. The side effects of antibiotics can in certain cases lead to ulcers, colic, and kidney damage if overused. Bazay (2021) In human medicine it has been studied and reported NSAIDS can lead to blood clots which certainly gives food for thought as we often compare the similarities two sets of athletes. Smhilt and Haemost (2011)

There are numerous studies being carried out about the rise in ulcers in horses and ponies, up to 90% of racehorses and 60% of show horses are presenting with ulcers. This is stated in certain studies, this figure is staggering. These percentages in ulcers cannot be all drug related, even the quietest of horses can become stressed for one reason or another. There are so many reasons that cause stress to horses to mention but here is a few just as a guide, scoping, clipping, traveling in a horse box, moving to a new yard, loudspeaker at competitions, their companion moving away, noise in a yard, as can be seen it is very difficult to always avoid stress. Biomedcentral.com (2016) Sedation and calmers are commonly used as an aid to calm, but at what expense? "More drugs in the bloodstream. -"

The calming influence of an Osteopathic Articular Balancing treatment has already been discussed and surely would be beneficial to calm the stressed horse before the gut becomes irritated. The Vagus nerve is one of the twelve cranial nerves and is associated with relaying information from the sensory organs back and forth to the brain, it helps regulate the heart rate, it acts as the inflammation nerve and also aids in acid secretion within the gut, the nerves enter the diaphragm, the diaphragm is connected to the ribs covered in fascia which

connects to different parts of the bodies by connective tissue which is covered in sensory nerves. Within human medicine problems with the Vagus nerve relate to IBS, back pain, TMJ problems, pelvic pain, and high levels of stress. The symptoms of the horse that presents with ulcers are strikingly similar. That girthy horse that looks worried and runs to the back of the stable when they see a saddle is very similar to the stress levels in humans as an effect of a damaged Vagus nerve. There looks to be a case to use Osteopathic Articular Balancing as a treatment to where the irritated Vagus nerve can be stimulated and relaxed, it could settle the heart rate, ease inflammation, and keep the gut relaxed, all three of these things are paramount in the relaxation of horses and would promote the gut to a healthy state and ulcer free. Wycoff (2020) The alternative is perhaps another drug to mop up the excess acid, this is great in theory, but it must be hard to calculate how much mucus to protect the stomach lining is mopped up in the process. www.equitopiacenter.com

The use of steroids (corticosteroids), corticosteroids are a manmade synthetic steroid used as a replacement for the hormone to decrease inflammation. Corticosteroids have become very common practice now in veterinary practice. The idea is to take away inflammation and increase the movement of the joint within the joint capsule. There are range of studies being undertaken to investigate the detrimental effects of too many injections can break down the structure of the joint, aaep.org (2016) Horse and Hound (2018). The concerns also include infection at the site where the needle enters the joint and the main concern being horses and ponies that are prone to laminitis and Cushing's disease. The blocking of the enzymes response within the drugs can cause an adverse reaction of the articular venous anastomosis (AVA, s), the venous system within the hoof, the effect inappropriately opens and closes the veins creating a breakdown of the laminae that supports the pedal bone within the hoof leading to laminitis. Stashak (2002) Curtis (2002). If movement of all the structures and bodily fluids of the equine athlete can be achieved and maintained by the methods of

Osteopathic Articular Balancing, it perhaps can lessen the need of having foreign bodies administered to the horse creating a metabolic imbalance within the horse.

Conclusion

As the paper comes to an end, it can be seen that osteopathy and in particular Osteopathic Articular Balancing has as much a place in society today as back in 1874 with Dr AT Still. The training of the equine athlete today is advancing with the use of technology and better surfaces to train them on, making them a fitter, stronger and faster machine but with this comes a need to maintain and look after that athlete to the best of all our ability. If it could become normal practice to get a horse checked over on a regular basis to address that small problem before it becomes something major, would be far more beneficial for the horse, owner, and osteopath. The popularity of osteopathy in human sports medicine due to results and research will surely help promote equine osteopathy further. There is a lot more theory and hands on feedback to be learnt on the Vagas nerve and ulcers, but it certainly is a very exciting study giving the rise in ulcer diagnosis. It very much hoped that such studies and passion for the art of Osteopathy can get Equine Osteopathy to a stage where Osteopathic Articular Balancing is tried first for, such problems as joint pain and restriction before a joint is medicated, if after a few treatments there is no improvement, it is understandable the medication is probably the next stage in treatment. Good veterinary care is still very much needed, and both forms of medicine can really benefit each other. There are sections within this thesis that very much support the theories of Dr A T Still that structure governs function and in turn promotes the wellbeing within the horse, this very much supports the teachings and learning of Osteopathic Articular Balancing as a treatment for the equine athlete.

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