Discover Osteopathy the Fountain of Youth; A New Paradigm in Cancer Prevention.

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Osteopathy is the Hallmark of the Vitality We Seek.

Getting older is inevitable but we can have an impact on the aging process. Youthful, as defined by Websters dictionary is "having the vitality or freshness of youth" or "having accomplished or undergone little erosion"[1]. If youth is the opposite of aging then to stay youthful, the aim is to increase vitality and to decrease erosion. Manual osteopathy is a way to support our bodies against aging. By keeping our bodies more limber through manual therapy we are able to stay more active and more vital. Manual Osteopathy reduces restriction within the body therefore enabling better circulation which is key in preventing erosion, disease and also inflammation. Inflammation is scientifically proven to be a precursor to cancer. According to this article taken from World Journal of Gastrointestinal Surgery entitled Inflammation and Cancer, "There is evidence supporting the hypothesis that inflammation participates in providing conditions that lead to cancer" [2]. A German physician named Rudolf Virchow "postulated that micro inflammation that results from irritation leads to the development of most chronic diseases including cancer"[3]. In the following pages, the evidence supports how Manual Osteopathy plays a role in maintaining youthful vitality and preventing age related erosion and diseases, such as cancer.

The Whole Approach of Osteopathic Care.

Dr Andrew Taylor Still is the father of Osteopathy. The term 'Osteo' meaning bone and 'pathic' meaning disease illustrates the relationship that structure and function are intertwined and is the hallmark for the following principals upon which Dr. Still created the manual practice of Osteopathy.

- The body is a unit.
- Structure governs function.
- The body possesses self-regulatory mechanisms.
- The body has the inherent capacity to defend and repair itself
- When normal adaptability is disrupted, or when environmental changes overcome the body's capacity for self-maintenance, disease may ensue.
- The movement of the body fluids is essential to the maintenance of health.
- Nerves play a crucial part in controlling the fluids of the body.
- There are somatic components to disease that are not only manifestations of disease but also are factors that contribute to maintenance of the diseased state." [4]

Based on these principals and the very definition of Osteopathy, we can start to see the connection between movement, flow and circulation being in opposition to stagnancy, inflammation and disease. Similarly, the concepts of youth, remaining vital, having energy and freedom of movement are concurrently opposite to aging concepts of immobility, erosion and disease. The Encyclopedia Britannica defines Aging as, "*progressive physiological changes in an organism that lead to senescence, or a decline of biological functions and of the organism's ability to adapt to metabolic stress*"[5]. Here, aging is seen as a decline in health but aging can simply mean growing older. When we begin to address illness and a decline in health as a separate phenomenon, related perhaps to an onslaught of events but not exclusive to our chronological age, then new paradigms in this business of staying young may well emerge.

Inflammation VS. Circulation

As outlined above, the movement of body fluids is essential to health. Nerve synapses play a central role in the regulation of these fluids. Boney structures, muscles and fascia are keys to unblocking nerve and fluid portals to allow for the healing self regulation mechanisms to occur. While inflammation is the body's response to infection, toxins or trauma, the body will naturally counter balance with an anti-inflammatory response. In chronic inflammatory conditions however the body's corrective abilities are interrupted, and chronic pain and or inflammation ensues. When inflammation persists for a long duration, the next phase is infection. The accepted philosophy of inflammation, is that irritation in all forms leads to an inflammatory state. Inflammation may cause a reduction in circulation with considerable stagnation, that can lead to infection thus creating a positive feedback loop of chronic pain/irritation, inflammation and further infection. So the big question is, how does Manual osteopathy play a role in the correction of this cycle?

Osteopathy: A Recipe for Cancer Prevention and Youthful Longevity.

1) Investigation:

An Osteopathic assessment is the initial step. Performing an orthopaedic examination, combined with joint and soft tissue palpation, a Manual Osteopath is able to locate restrictions within the body. Treatments such as craniosacral therapy involve subtle listening to the cerebrospinal fluid (CSF) flow which can be a good indicator of circulation problems

within the body. This procedure also allows Osteopaths to find inter cranial restrictions, which may inhibit proper sensory feedback in the central nervous system. Additionally, organs are palpated using Visceral Manipulation to determine organ mobility and motility to assess restrictions or improper function. Imbalance can also be seen through gait evaluation and range of motion testing. These methods are just the tip of the iceberg to the investigative skills available to a Manual Osteopath.

2) Treatment:

A Manual Osteopath utilizes many techniques such as Joint Mobilization, Muscle Energy Techniques, Spinal Manipulation (in Canada mobilization), Soft Tissue Therapy, Lymph Drainage, Myofascial Release Techniques, Balanced Ligamentous Tension Techniques as well as Craniosacral Therapy and Visceral Manipulation to name a few. These varied techniques combined give Manual Osteopaths a wide range of access to assist in treating restriction, inflammation and dysfunction affecting biomechanics or interrupting selfcorrective mechanisms.

3) Techniques:

Mobilization is a key treatment used by Manual Osteopaths to address ligaments and joints in allowing more freedom between all the bones in the body. This hands on technique utilizes gentle traction with multi directional release techniques to mobilize and elongate ligaments. This creates freedom within the joint for the nerves to exit, improves alignment and restores inherent motion. Nerves as we know from Osteopathic principles play a key role in controlling the fluids of the body. Proper circulation is necessary to deal with inflammation or infection once it manifests. Mobilization techniques calm the central nervous system and bio-mechanical corrections reduce pain, increases motion and decreases inflammation. These benefits promote good health through all stages of life.

Muscle Energy Techniques (MET) can be extremely helpful in releasing muscle spasm, decreasing pain, aligning bones and increasing range of motion. This contributes to leading a more active lifestyle. These manual techniques are performed using the patients active involvement. They allow tight/strained muscles to release through a sequence of contraction with resistance, rest and stretch interval exercises. Ultimately, the contraction/stretch affects both the contracted and relaxed opposing muscles to release. This techniques is most known for the benefit of increased range of motion it offers, consequently MET has been modified and used in various other therapies for its effective results.

Soft Tissue Therapy is another great way to enhance relaxation, decrease muscle tension, increase detoxification and circulation. There are a number of modalities used by an Osteopath that fall under this category including Swedish massage, Myofascial Trigger Point techniques and other Fascial release methods. The primary idea here is that an Osteopath is looking at whole structure and whole function where muscles and soft tissues must be addressed in order to obtain proper alignment and function.

Lymphatic drainage another type of soft tissue therapy, is a beneficial technique used to enhance lymphatic flow and help the body to rid itself of toxins. Stuck toxins can be a root cause of various diseases and challenge organs especially the liver and kidneys whose job it is to filter toxins out. This technique is best used on a regular basis to detoxify the body as a wellness technique in disease prevention.

Craniosacral Therapy (CST) provides a method to work directly with the skull bones which can be essential for proper sensory feedback and the entire central nervous system (CNS). The CNS sends out cues to heal the body when it is injured, inflammation is often a first response. CST reestablishes the calm parasympathetic state to further reduce shock, inflammation and increases the body's ability to flush out toxins and boosts immune response. CST does this by stilling the cerebrospinal fluid within the body's semi-closed hydraulic system. The ability to work with both body and cranium, accessing dura lining within the skull and spinal cord give Osteopaths a leading edge to deal with concussions, headaches and a multitude of other sensory disorders which are quite commonplace. In fact, all Osteopathic techniques will have a calming affect on the CNS.

Visceral Manipulation gives access to inherent autonomic movements within the organs to help them function more optimally. The visceral model also accesses emotions stored in the visceral bodies. Somatic Emotional Release is often a part of any hands on therapy, 'the issues are in the tissues' is a common saying. Releasing the viscera can have a therapeutic psychological effect as each organ holds within it a predilection towards certain emotions. A study published in The National Library of Medicine, aimed at assessing the impact of Osteopathic treatment on various psychological states concludes, "The findings show that there were significant reductions in anxiety, pain, mental health dysfunction and improvements in self-care" [6]. A better mental state and less pain would be beneficial for everyone especially as we age. Science has show over the years there is a direct correlation between mental health and disease. By encouraging the inherent visceral motion and releasing restriction, the organ functions better. There is better blood flow, better digestion, hormones can regulate more easily and better health ensues. Healing is proportionate to blood flow and all Osteopathic techniques aid blood flow to the brain and body. Proper blood flow contributes to better oxygenation, improved brain functions and increased communication with the entire body.

4) Prevention:

Therapeutic exercises which we commonly associate with physiotherapy or rehabilitation are a large part of Osteopathic therapeutic offerings. The added bonus of getting regular wellness check ups with an Osteopath is the ability to consult with you on a regular basis about things you can do to strengthen your body to keep it from getting injured. Although it can help to remedy injury, typically physiotherapy and rehabilitation type models are sought out post injury however with Osteopathic wellness care you are given exercises for ongoing prevention. This is very beneficial as we age. Proper strengthening exercises can decrease the occurrence and severity of falls or injuries that could become life threatening. **Healthy Diet** is an additional was to address disease prevention and healthy ageing. A Manual Osteopath can help guide to make healthy food choices that support you in various ways. Whether you have concerns about healthy eating as an athlete or are looking to prevent diseases such as Osteoporosis and want to be proactive with your diet, an Osteopath can help you make informed choices.

Ongoing mental health practices are important to your wellbeing and Osteopaths believe the body is a whole unit. Whether it is doing something you love weekly, meditating daily or simply spending quality time with loved ones, an Osteopath will encourage you along the path of self care and positive practices.

Manual Osteopathic examination as seen above is great for assessing areas that need attention. A myriad of Osteopathic techniques are designed to release restriction, reduce inflammation and increase range of motion. A Manual Osteopath is adept at working with injuries, chronic pain, stress and wellness and is able to educate the patient on strengthening and injury prevention. Wouldn't having less stress enable you to feel a little more vibrant? Wouldn't taking strides to eliminate inflammation, reduce your risk for a variety of diseases, including cancers? Wouldn't it be beneficial as you age to have someone provide competent assessment and treatment to maintain your wellness and mobility in years to come? The answer to all of these as the research has shown is, yes. Positive maintenance and proactive therapy is largely what Osteopathic wellness maintenance is about. These innovative and researched methods can help us shift the outdated idea that aging needs to be a decline of biological function and help the aging population maintain a more active, healthy and happy lifestyle!

Conclusion and Final Thoughts.

In closing I would like to share on a personal note: This topic was chosen as a tribute to my brother Richard Jacques who passed away four years ago from cancer. He had been riddled with severe arthritic inflammation for years and at the time I had no knowledge of this connection between inflammation and cancer. Since that time, I have come to discover the science behind inflammation that might have made some difference for my brother earlier on. It is my hope that with this information others may be able to become proactive as they begin to see inflammation in it's earlier stages when it can make the most difference. My brother benefitted greatly from the manual therapy I did provide for him on my visits, I only wish I had this knowledge to share back then, as we may have discovered a different road together.

It was the goal of this study to bring together the ideas and concepts of Osteopathy and make it applicable to our lives. Wellness and the prevention of disease can become a wiser approach to aging. A decline in health and biological functions do not need to be inevitable. It is my hope a new paradigm is born in connecting disease to the need for circulation, for this to be the ultimate goal and for Manual Osteopathy to be one possible solution, to a future better lived!

References in order:

[1]. Websters dictionary: 'Youthful' definition https://www.merriam-webster.com/dictionary/youthful

[2] World Journal of Gastrointestinal surgery - Published online March 27, 2012 Inflammation and Cancer - Authors Noemi Eiro and Francisco J Vizoso <u>https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3332223/</u>

[3]. Epigenics Development and Disease - Page 628 - by M.K. Shanmugam and G.Sethi - Editor Tapas K. Kundu

https://books.google.ca/books?

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[4] Osteopathy Models for Diagnosis, Treatment and Practice - by Jon Parsons and Nicholas Marcer

Chapter 1 - Page 9: Still's founding principles

[5] The Encyclopedia Brittanica: 'Aging' definition *https://www.britannica.com/science/aging-life-process*

[6] US National Library of Medicine - Published May 10, 2018 - An Evaluation of Osteopathic Treatment on Psychological Outcomes with Patients Suffering from Chronic Pain: A prospective observational cohort study collected through a health and well-being academy *https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5952292/*