

Introduction to Biodynamic Craniosacral Therapy

by Michael Kern,
DO., R.C.S.T., M.I.Cr.A., N.D.

Life and motion

Life expresses itself as motion. At a deep level of our physiological functioning all healthy, living tissues subtly "breathe" with the motion of life - a phenomenon that produces rhythmic impulses which can be palpated by sensitive hands. The presence of these subtle rhythms in the body was discovered by osteopath Dr William Sutherland over 100 years ago, after he had a remarkable insight while examining the specialized articulations of cranial bones. Contrary to popular belief Dr Sutherland realized that cranial sutures were, in fact, designed to express small degrees of motion. He undertook many years of research during which he demonstrated the existence of this motion and eventually concluded it is essentially produced by the body's inherent life force, which he referred to as the "Breath of Life." Furthermore, Dr Sutherland discovered that the motion of cranial bones he first discovered is closely connected to subtle movements that involve a network of interrelated tissues and fluids at the core of the body; including cerebrospinal fluid (the 'sap in the tree'), the central nervous system, the membranes that surround the central nervous system and the sacrum.

The "Breath of Life"

The Breath of Life produces a series of subtle rhythms that may be palpated in the body and which make up an integrated physiological system. At least three subtle rhythms have been identified in this "primary respiratory system", each having a different rate and producing rhythms within rhythms. These three "tides" are referred to as:

- the cranial rhythmic impulse; a more superficial rhythm expressed at an average rate of 8-12 cycles per minute,
- the mid-tide; a tidal rhythm that carries ordering forces into the body expressed at a slower rate of approximately 2.5 cycles per minute and
- the long tide; a deep and slow rhythmic impulse expressed about once every 100 seconds. The long tide is considered to be the first stirring of life and motion as the Breath of Life emerges from a deeper ground of stillness at the center of our being.

Essential ordering principle

In the biodynamic approach of craniosacral work the subtle rhythms produced by the Breath of Life are regarded as expressions of health that carry an essential ordering principle for both body and mind. Dr Sutherland realized the important role played by the fluids in the body (particularly cerebrospinal fluid) in helping to disseminate these ordering forces throughout the body.

The essential ordering principle carried in the rhythms of the Breath of Life acts as a blueprint for health which is present from the time of our early embryological development and is the fundamental factor that maintains balance in our form and function. Thus, the ability of cells and tissues to express their primary respiratory motion is a critical factor in determining our state of health - when these rhythms are expressed in fullness and balance, health and well-being naturally follow.

Inertial patterning

During the course of our lives our bodies become patterned, shaped and conditioned according to how we're able to deal with any stresses or traumas. If stresses or traumas are overwhelming, they become locked in the body as sites of inertia - until such a time as we are able to access resources that allow them to be processed and released. These sites of inertia effect the natural rhythmical movements of the Breath of Life and so hinder the ability of our essential blueprint for health to manifest at a cellular level.

Common causes of inertia are physical injuries, emotional and psychological stresses, birth trauma and toxicity. Due to an accumulation of these stresses, tissues can become imprinted with the memory of unresolved experiences and so act like video tape which may keep replaying whenever stimulated.

A gentle facilitation

The emphasis in Biodynamic Craniosacral Therapy is to help resolve the trapped forces that underlie and govern patterns of disease and fragmentation in both body and mind. This involves the practitioner "listening through the hands" to the body's subtle rhythms and any patterns of inertia or congestion. Through the development of subtle palpatory skills the practitioner can read the story of the body, identify places where issues are held and then follow the natural priorities for healing as directed by the patient's own physiology.

The intention of treatment is to facilitate the expression of the Breath of Life and so enhance the body's own self-healing and self-regulating capabilities. This is done in a non-invasive way as the practitioner subtly and gently encourages the conditions that allow for the reemergence of primary respiratory motion. Furthermore, the practitioner's deep and clear quality of presence can become a reflective mirror for the patient and an invaluable cue for their potential for change.

A holistic approach

Biodynamic Craniosacral Therapy takes a whole-person approach to healing and the inter-connections of mind, body and spirit are deeply acknowledged. It is an effective form of treatment for a wide range of illnesses helping to create the optimal conditions for health, encouraging vitality and facilitating a sense of well-being. It is suitable for people of all ages including babies, children and the elderly, and can be effective in acute or chronic cases.

*"Worms will not eat living wood where the vital sap is flowing; rust will not hinder the opening of a gate when the hinges are used each day.
Movement gives health and life.
Stagnation brings disease and death."*

- proverb in traditional Chinese Medicine

Here is a list of stress related symptoms. You can see that the list includes physical, emotional and mental symptoms.

Clacification
Sore bones
Sore muscles
Sore ligaments
Sore tendons
Soreness in general and inflamation
Back pain
Ulcer
Restless
Shortness of Breath
Skin problems
Stomach problems
Excessive eating
Restless
Shortness of Breath
Skin problems
Stomach problems
Tense / hard muscles
Difficulty remembering
Many worries
Feelings of fear
Feeling "down"
Feeling of hopelessness
Feeling of a lack of energy or heaviness
Lack of interest in everything
Feeling of being tense after exertion
General anxiety
Frequent accidents or injuries
Frustration
Grinding teeth at night
Headache (tension and migraine)
Irregular heart beat
Heartburn
Haemorrhoids
High blood pressure
Difficulty sleeping
Irritability
Loss of appetite
Loss of interest for sex
Excessive eating
Sore neck and shoulder muscles
Allergy
Anger
Arthritis
Asthma
Pains in the chest
Tightly clenched teeth
Cold hands and feet
Influenza

Irritation of the large intestine
Constipation
Extended periods of depression
Eye or facial tensions
Hyperventilation
Increase in drinking or smoking habits
Poor Digestion
Tendency to start to cry
Diarrhoea
Difficulty to agree
Difficulty to make a decision
Dizziness
Excessive daydreaming and fantasising
Excessive use of medicine with or without prescription
Excessive or unreasonable distrust of friends/colleagues
Uncalled for sweating
Difficulty concentrating
infections
Clump in the throat
Menstruation pains
Forgetfulness
Nervous
Nightmares

Frequently asked questions

What's the best way to find out about Craniosacral Therapy?

Obviously the most effective way to find out about Craniosacral Therapy is to have a session yourself or participate in an introductory seminar. However, if you prefer to get an impression in advance, the best way to do that is to ask someone who has already had CST. That's not going to be possible for everyone so you may want to contact a practitioner – this has the advantage of getting a sense of what the practitioner is like as well as being able to ask specific questions about Craniosacral Therapy.

What does Craniosacral Therapy feel like?

Most people find cranial sessions pleasant and relaxing. People often talk of feeling as if they have 'had their batteries charged'. Sometimes people feel tingling or numbing sensations or they may experience momentary discomfort related to past events. When this settles the net result is one of feeling better. People often feel as if things are reorganising inside them or as if a weight has been lifted from their shoulders.

What does a session involve?

The client usually lies (or sometimes sits) fully-clothed on a comfortable treatment couch. The therapist makes contact by placing their hands lightly on the client's body.

How many sessions will I need?

The number of sessions that people find helpful varies from person to person.

Will treatments help if I have no particular symptoms?

Yes, many people find that Craniosacral Therapy helps them cope with day-to-day difficulties, feel better and enjoy life more fully.

What is the interval between sessions?

Should you wish to have more than one session, subsequent sessions are usually a week to a fortnight apart. With long-term treatment the frequency of sessions usually reduces.

How safe is Craniosacral Therapy?

Craniosacral Therapy is a non-directive, non-analytical, non-invasive approach - essentially the art of listening and enabling the body to heal itself. When practised by a qualified therapist, it is a very safe method.

Is it head massage?

No. Because of the name – Craniosacral Therapy – people often think that it concerns only the head and spine whereas it can work with all of the mind and body.

I'm interested but sceptical – do I have to believe in it for it to work?

It helps to have an open mind, but the benefits of Craniosacral Therapy are not dependent upon faith in the treatment.

What is the difference between Craniosacral Therapy and Cranial Osteopathy?

Craniosacral therapists study cranial work exclusively. Most Craniosacral Therapy courses last two years. Cranial osteopaths train initially in osteopathy, a more mechanical approach, and then do postgraduate training in cranial work of variable length.

Craniosacral work tends to be integrated with psychotherapeutic understanding, theory and practice. There is a variable amount of overlap between individual approaches in the two professions. To get a fuller picture, talk to a practitioner to find if their approach is suitable for your needs.

How would you sum up the effects of Craniosacral Therapy?

Craniosacral Therapy belongs more properly within the Art of Healing than the Science of Medicine, and therefore the Craniosacral Therapy Association makes no claims as to the evidence base for the effectiveness of this work.

However, the Association recognises that absence of evidence is not evidence of absence, and is confident that the emerging science of the future will come to embrace subjective phenomena, personal narratives and other aspects of experience which much of the science of today regrettably tends to exclude.

Medical Advice

Craniosacral Therapy is intended to complement, not replace, the relationship you have with your medical practitioner. If you have or suspect you may have a health problem, please see your doctor. Never disregard medical advice or delay in seeking it because of anything you have read on this website.

Do you want to be a craniosacral therapist? What does it involve personally?

By Candice Marro

First tell me, do you have a quest?

Do you want to explore the moving waters of your existence? Do you like to dive deep into the unknown? Do you have in your heart nostalgia for something you can't name?

Then, open your eyes, take a deep breath, widen your attention, listen, feel, sense, taste, smell and prepare yourself. A mystery is waiting for you; something is waiting to engage with you, something that you can't imagine, you can't create, that you can only discover. You may be afraid to answer this call, you may prefer to skim the surface of the water, its uncomfortable but familiar fluctuations and its predictability. You may prefer to stick to your symptoms, resistance, identification, complexity for at least you have got used to them. You may argue that this is as good as you could do anyway, it is as far as you could go, as you are not equipped for deep exploration. And what lies beneath? Is it worth the diving, the risk and the letting go? You're attracted to this unknown, this darkness, but you keep coming back to your familiar surroundings.

This is familiar but you feel lonely, isolated, fragmented and tired to be pushed from one wave to another, to go from one experience to another without finding the sense of it all. When you think you've managed to get some stability, when you think you are in control of your life, when you think you can explain and fix things, a force and the play of its groundswell takes it all away from you. So you get more and more tired of fighting, losing, gaining and losing again as you try to grasp emptiness. You keep a smile on your face, but despair and fear are ruling in your heart. You wouldn't admit it but you're lost. Can't you see that this world of shapes you cherished and believed in is ruled by impermanence only?

So start your quest - use your grief and anger to find the strength to explore new layers. Deepen your breath, slow down your pace, get grounded and start your journey with a fellow explorer who is also not satisfied with the answers given so far and who wants to go deeper.

From the sea of impermanence to the still heart of the ocean

How to give it a try? You are going to use your hands as the servants of your heart. Your hands will be the eyes, ears and medium of your heart; not your confused and emotional heart but the heart of your heart, your Still Heart, your all-knowing and all-encompassing Heart. What is the gateway to this place within yourself? Find a neutral, a place within you where there is balance, calmness, availability. There is always such a place but not always the same one. Search for that place and settle into it. Let the neutral gradually spread to your whole system. Then open to your friend on this journey, this friend who is going to be both your client and your teacher. This is it, you have found a sense of stability within yourself and you have established your fulcrum, casting the anchor that will provide a sense of safety on your journey. Now open your perceptual field to the third presence that will be with you both, that is generated by your coming together: the relationship. Then start your exploration.

Inhale, exhale, inhale, exhale. Leave your fears and uncertainty behind, focus on your breath until you meet or are being met by The Breath, a deeper and slower inhalation and exhalation. The Breath breaths through you - actually it is breathing you. Can you feel it?

Stay with it. You are now invited to follow the cycles of primary or universal respiration. You are invited to trust the Breath of Life. Yes, the Breath that carries Life expressed to you as motion. This primary respiration leads you into the realm of life forces and principles. Let yourself be rocked by the long immutable rhythm of primary respiration. It is your fundamental support, a living presence that has always been there and will never cease.

Can you feel a shift happening? Can you feel your confusion, your noise and your fears now floating into the distance? Can you feel the relationship is orienting you both towards a place of resource, a place where the different layers of function work as a unit and are interdependent? However, this is not yet the place where you are One. But here, at least, you are not fragmented anymore. You are still in contact with tissue memory, symptoms and shapes but something more is there: organising forces.

In this realm you have allies: fluids and the potency within fluids. Yes, you can start to sense potency within the fluids, the ocean. Fluids that pass everywhere, go around any obstacles and patiently try to erode the barriers. And there is the fluid at the core of all fluid: a golden, subtle, potentized fluid that will teach you to be an alchemist. Can you now feel that your hands have become like antennas, more receptive, more empowered and potentized? Do you notice that one part echoes the whole, that the smallest fragment in the system is vital to the whole and plays a key role in maintaining balance?

But beware for these fluids are being moved and crossed by deep forces at work that you now start to feel; deep forces of creation, forces of health and forces of inertia. The fluid may be your ally provided that you learn its language, know how to work with it and know the nature of these forces that move it.

Because Stillness attracts Stillness

There is another discovery for you to make: this is the place where you can observe the ballet between biodynamics and biokinetics, out of which symptoms and shapes are organized. Simultaneously, you can now collaborate with and rely on your inner physician and that of your friend, your intrinsic intelligence that is constantly looking for the best possible dynamic equilibrium.

If you find congestion or a place of lesion, don't try to fix it. Try to see, feel, question the inner intelligence and its medium the fluid, so that they can show you what causes this strain. If you hold your enquiry with spaciousness and without expectation, if you work as a humble but active servant of the Breath of Life, then fluids (or something else) will take you to the center of inertia. This may frighten you, for the area may seem dense, dark, locked and almost without any life or light, but as you approach you may feel deep forces at play expressing a certain pattern. This is when you can work with the fluids, gently supporting or encouraging their lateral fluctuation. You can also learn the art of generating space. But the critical thing is to deepen into your own stillness. Why? Because stillness attracts stillness and at the heart of this fulcrum, stillness and health are waiting to be liberated. So, don't fight inertia as you would reinforce it. Rather, increase stillness and resources. Again, find a neutral, suggest balance between the forces until you feel an opening and a way through. Deepen into this neutral and this dynamic equilibrium and wait to see how far these forces want to reorganize. If it's too early, just establish more peaceful conditions in the area and come back later.

So you see, you are going to spend time learning how to listen and how to be with what you find, getting to know the territory, developing your perception based on experience. Get familiar with the embodied forces and their different qualities: dark, light, luminous, heavy, dense, clear, congested, compressed, etc. The main danger for you is to end up chasing shapes, you would only be chasing ghosts. Remember the Knight's example: always look for the heart of the dragon. If your sword cuts pieces, limbs and parts, you would be so exhausted by the time you get to the core, you wouldn't be able to see the door. You would have used up all your resources in the fight as well as run down your friend's battery. Always work with potency, even at the heart of the fulcrum. Always look for the origins rather than the effects. Learn to collaborate with the inherent plan that unfolds its priorities for you, rather than trying to order the chaos. Chaos will always ultimately reinstall its supremacy, unless ... you discover the inner principle present at its heart. And trust this luminous darkness that will unfold between your hands and know perfectly how to achieve balance and integration.

Wait until you are invited

What do you have to do now? Follow an elder's advice. He's been there before and knows what he's talking about; "Trust the Tide and get out of the way!" Dare to participate and be contemplative; a humble servant always ready to engage. Don't be afraid of inertia as it always leads you to Health. And wait, wait for a mysterious gateway into the unknown. Yes, you have come to a point when you feel your heart is longing for something more to happen, for the presence of the beloved. And you suspend your breath with both anguish and joy.

But wait, wait, wait ... until you are invited. Get to rest. Be alert, be passionate, hold your quest and your faith deep in your heart.

The gateway is quite unexpected, it is as small as the eye of a needle but has the power to create stillness in the whole environment. Now there is a pause, as if everything is holding its breath. Something happens, quick! Go with the potency and fluids, take a deep breath, hold on and close your eyes. Open them now. Through this infinitesimal, localised place you have arrived at the Infinite Realm. You are at the heart of Life's organizing forces, at the heart of the cellular information. There is an incessant activity and there is stillness. This is where the airy and infinite space meets with the dark and deep ocean. From this meeting, form is generated!

You don't know where to go, you're lost and overwhelmed, but you know this place, you remember it. Information seems to explode at the heart of your cells as the original blueprint within you meets the blueprint within the universe.

Come now, a presence is taking your hand. Many beings are welcoming and engaging you. They are so happy you're here! They are leading you to a lotus flower at the center of which you sit. At this point, you realize you are naked, like at the beginning and at the end. You explore this realm, its infinite space, its spirals and its uni-directional, centripetal and centrifugal forces, its vacuums, its majestic darkness, its musical silence, its darker and darker yet dynamic Stillness. From this Stillness, you see life arising, materializing all shapes and forms, filling them with potency. You also see these shapes, forms, fluids and potency being reabsorbed back into the heart of Stillness. Can you see these mid-lines from which everything seems to be suspended in perfect balance? You observe the different rhythms of unfoldment, cycles of life and death and how all forms are bound together by a subtle liquid substance, a crystalline matrix. Yes, this is this subtle network that maintains form and dissolves it. And, this is just the beginning of your exploration.

Tell me, do you feel lonely in this place where you feared to go to? Open your ears, can't you hear the murmur of a song that seems to be meant for you? You feel wrapped by a presence; a presence that comes closer as you surrender your fears. Now look - facing you, omnipresent, She is here, holding you in the palm of her hand that is also the center of her heart. Now, you know she is looking both at you and within you. You see majesty, beauty, silence. You see what you will never be able to describe.

Research Effectiveness of Craniosacral Therapy

Cranio Sacral Therapy Association (CSTA)

We mostly rely on anecdotal evidence provided by satisfied clients to their family and friends in developing our craniosacral Practices. From time to time, we're asked to provide clinical evidence confirming the effectiveness of craniosacral therapy, and an evidence-base for its use. Evidence-based Practice (EBP) is becoming increasingly required in all therapies both within complementary and within conventional medicine.

Increasingly, we find medical professionals wanting to use our services for some of their patients but being reluctant to do so due to the lack of evidence-based research. This situation is reflected in many complementary therapies.

The purpose of this webpage is to help support and promote the need for effectiveness evidence within cranio sacral therapy (CST). Our aims are as follows:

- Promote and inform all readers of current research projects being undertaken by members; including asking direct permission of such members to publish their studies
- Promote CSTA's interest in advocating Evidence Based Practice
- Request members to look out for/help in seeking research funding
- Give members access to current research references

The on going qualitative study being sponsored by CSTA and carried out by one of our members, Nicola Brough, as part of a Masters by Research degree at Warwick University Medical School will provide valuable research information that CSTA has not previously had: qualitative methodology allows us to better understand clients' experiences and to make an informed decision about an appropriate outcome measure to gather data.

CSTA wants to build on the information provided by the qualitative study by continuing to develop an on-going research programme to design a quantitative study to explore the effectiveness of CST. Such research requires funding and CSTA will be seeking the help of its members to identify research funding and to obtain such funding.

Members have identified a number of studies that, taken together, provide a glimpse of how effective craniosacral therapy and cranial osteopathy can be.

Children and CST

Amiel-Tison C, Soyez-Papiernik E. Cranial osteopathy as a complementary treatment of postural plagiocephaly. *Archives de Pédiatrie*. 2008;15 Suppl 1;S24-30.

Cozzolino V, La Mola E, Ciardelli F, et al. Impact of OMT on reducing length of stay in a population of pre-term infants. *International Journal of Osteopathic Medicine*. 2010;13(3):119

Gillespie BR. Case study in paediatric asthma: the corrective aspect of craniosacral fascial therapy. *Explore (NY)*. 2008;4:48-51.

Gillespie BR. Case study in attention-deficit/hyperactivity disorder: the corrective aspect of craniosacral fascial therapy. *Explore (NY)*. 2009;5:296-8

Hayden C, Mullinger B. A preliminary assessment of the impact of cranial osteopathy for the relief of infantile colic. *Complementary Therapies in Clinical Practice*. 2006;12:83-90..

Lim KW. Infantile colic: A critical appraisal of the literature from an osteopathic perspective. *International Journal of Osteopathic Medicine*. 2006;9:94-102.

Lucassen PLBJ, Assendelft WJJ, van Eijk JThM, et al. Systematic review of the occurrence of infantile colic in the community. *Archives of Disease in Childhood*. 2001;84:398-403

Lucassen P. Colic in infants. *Clinical Evidence*. 2010;02:309 Madeline LA, Elster AD. Suture closure in the human chondrocranium: CT assessment. *Radiology*. 1995 ;196:747-756

Mills MV, Henley CE, Barnes LL, et al. The use of osteopathic manipulative treatment as adjuvant therapy in children with recurrent acute otitis media. *Archives of Paediatric and Adolescent Medicine*. 2003;157(9):861-6.

Sergueef N, Nelson KE, Glonek T. Palpatory diagnosis of plagiocephaly. *Complementary Therapies in Clinical Practice*. 2006;12(2):101-10.

Steele KM, Viola J, Burns E et al. Brief report of a clinical trial on the duration of middle ear effusion in young children using a standardised osteopathic manipulative medicine protocol. *Journal of the American Osteopathic Association*. 2010;110(5):278-84

Wahl RA, Aldous MB, Worden KA et al. Echinacea purpurea and osteopathic manipulative treatment in children with recurrent otitis media: a randomised controlled trial. *BMC Complementary Medicine*. 2008;8:56

Wyatt K, Edwards V, Franck L, et al. Cranial osteopathy for children with cerebral palsy: a randomised controlled trial. *Archives of Disease in Childhood*. 2011 Jun;96(6):505-12. Epub 2011 Feb 24.

Vandenplas Y, Denayer E, Vandenbossche T, et al. Osteopathy may decrease obstructive apnea in infants: a pilot study. *Osteopathic Medicine in Primary care*.

Vohra S, Johnston BC, Cramer K, et al. Adverse events associated with pediatric spinal manipulation: a systematic review. *Pediatrics*. 2007;119(1):e275-83.

CST Technique

Degenhardt BF, Kuchera ML. Osteopathic evaluation and manipulative treatment in reducing the morbidity of otitis media: a pilot study. *Journal of the American Osteopathic Association*. 2006;106(6):327-324.

Drengler KE, King HH. Interexaminer reliability of palpatory diagnosis of the cranium. *Journal of the American Osteopathic Association*. 1998;98:387

- Green C et al. A systematic review of craniosacral therapy: biological plausibility, assessment reliability and clinical effectiveness. *Complementary Therapies in Medicine*. 1999; 7(4):201-7)
- Hanten WP, Dawson DD, Iwata M, et al. Craniosacral rhythm: reliability and relationships with cardiac and respiratory rates. *Journal of Orthopaedics and Sports Physical Therapy*. 1998;27:213-218
- Hartman SE. Cranial osteopathy: its fate seems clear. *Chiropractic & Osteopathy*. 2006, 14:10 , 2006
- Hartman SE, Norton JM. Interexaminer reliability and cranial osteopathy. *The Scientific Review of Alternative Medicine*. 2002;6(1):23-34
- Melsen B. Time and mode of closure of the spheno-occipital synchondrosis determined on human autopsy material. *Acta Anatomica*. 1972;83:112-118
- Upledger JE. The reproducibility of craniosacral examination findings: a statistical analysis. *Journal of the American Osteopathic Association*. 1977;76:890-899. 2008;2:8.
- Nelson KE, Sergueef N, Lipinski CM, et al. Cranial rhythmic impulse related to the Traube-Hering-Mayer oscillation: comparing laser-Doppler flowmetry and palpation. *Journal of the American Osteopathic Association*. 2001 Mar;101(3):163-73.
- Norton JM. A challenge to the concept of craniosacral interaction. *American Academy of Osteopathy Journal*. 1996;6(4):15-21
- Okomoto K, It J, Tokiguchi S, et al. High-resolution CT findings in the development of the sphenoccipital synchondrosis. *American Journal of Neuroradiology*. 1996;17:117-120
- Pick MG (1994) A preliminary single case magnetic resonance imaging investigation into maxillary frontal-parietal manipulation and its short term effect upon the intracranial structures of an adult human brain. *J Manipulative Physil Ther* 17: 168-73
- Rogers JS, Witt PL, Gross MT, et al. Simultaneous palpation of the craniosacral rate at the head and feet: intrarater and interrater reliability and rate comparisons. *Physical Therapy*. 1998;78:1175-1185
- Sahni D, Jit I, Neelam A, et al. Time of fusion of the basisphenoid with the basilar part of the occipital bone in northwest Indian subjects. *Forensic Science International*. 1998;98:41-45
- Sergueef N, Nelson KE, Glonek T. The effect of cranial manipulation on the Traube-Hering-Mayer oscillation as measured by laser-Doppler flowmetry. *Alternative Therapies in Health and Medicine*. 2002;8(6):74-6
- Moran RW, Gibbons P. Intraexaminer and interexaminer reliability for palpation of the cranial rhythmic impulse at the head and sacrum. *Journal of Manipulative and Physiological Therapeutics*. 2001;24(3):183-90.
- Moskalenko IuE, Vainshtein GB, Riabchikova NA, et al. Interhemisphere asymmetry of the CSF dynamics and biomechanical properties of the skull. *Russ Fiziol Zh Im I M Sechenova*. 2010;96(10):1005-13.

Nelson KE, Sergueef N, Glonek T. Recording the rate of the cranial rhythmic impulse. *Journal of the American Osteopathic Association*. 2006;106(6):332

Wirth-Patullo V, Hayes KW. Interrater reliability of craniosacral rate measurements and their relationship with subjects' and examiners' heart and respiratory measurements. *Physical Therapy*. 1994;74:909-920-.

Effectiveness of CST

B Isbell and S Carroll (2007) The effectiveness of craniosacral treatment *Fulcrum* issue 41: 2-5. Also www.craniosacral.co.uk/articles/Effectiveness_CST_Isbell.pdf

Harrison RE, Page J Multipractitioner Upledger Craniosacral Therapy: Descriptive outcome study 2007 – 2008. *Journal of Alternative and Complementary Medicine*. Volume 17. Issue 1 2011: 13 – 17.

CST and Neurology

Castro-Sanchez A.M, Guillermo A Matara´ n-Pen˜ arrocha, Labraca N.A, Quesada-Rubio J.M, Granero-Molina J Moreno-Lorenzo C. A randomized controlled trial investigating the effects of craniosacral therapy on pain and heart rate variability in fibromyalgia patients. *Clinical Rehabilitation*. 2011; 25: 25–35

Linda A. Gardner, PhD, RN; Laura K. Hart, PhD, RN; and M Bridget Zimmerman. PhD “Craniosacral Still Point Technique Exploring its Effects in individuals with Dementia”. *Journal of Gerontological Nursing*. Vol 34. No. 3, 2008 www.slackjournals.com/article.aspx?rid=26916

Greenman PE, McPartland JM. Cranial findings and iatrogenesis from craniosacral manipulation in patients with traumatic brain syndrome. *J Am Osteopath Assoc*. 1995; 95(3):182-188.

Lancaster DG, Crow WT. Osteopathic manipulative treatment of a 26 year old woman with Bell's palsy. *J Am Osteopath Assoc*. 2006;106:285-9

Milnes K, Moran RW. Physiological effects of a CV4 cranial osteopathic technique on autonomic nervous system function: A preliminary investigation. *International Journal of Osteopathic Medicine*. 2007;10(1):8-17 41

Raviv G, Shefi S, Nizani D, Achiron A Effect of craniosacral therapy on lower urinary tract signs and symptoms in multiple sclerosis. *Complement Therapy Clinical Practise*. 2009 May;15(2): 72-5.

Miscellaneous

Leach J. Osteopathic support for a survivor of gastric cancer: A case report. *International Journal of Osteopathic Medicine*. 2008;11:106-11

Mehi-Madrona L, Kigler B, Silverman S, Lynton H, Merrell W, “The impact of acupuncture and craniosacral therapy interventions on clinical outcomes in adults with asthma”. *Explore (NY)*. 2007 Jan-Feb; 3(1) :28-36 www.ncbi.nlm.nih.gov/pubmed/17234566/.

Vohra S, Feldman K, Johnston B, et al. Integrating complementary and alternative medicine into academic medical centers: experience and perceptions of nine leading centers in North America. BMC Health Services Research. 2005; 5:78.

Case histories reported by Journalists

This is what is known as anecdotal evidence, being specific to that client and that therapist and as such cannot be generalised to the population as a whole. Such case studies are of value in providing positive evidence and giving a sense of how effective CST treatments can be should larger scale trials be proven to support such effects.

Literature Searching

Below are useful links for literature searching.

National Council for Osteopathic Research - www.brighton.ac.uk/ncor/

PubMed - www.ncbi.nlm.nih.gov/pubmed/

The Medical Research Council - www.mrc.ac.uk/Ourresearch/index.htm

The Cochrane Collaboration – Complementary Medicine
www2.cochrane.org/reviews/en/subtopics/22.html

Science Direct Database www.sciencedirect.com/science/journal/15508307/

If you have any research funding suggestions or any other comments please email the Research Group Chairman at dellis26@btinternet.com.

CSTA Research Group
December 2011.

HISTORY OF CS

THE HISTORY AND DEVELOPMENT OF CRANIOSACRAL WORK

"Worms will not eat living wood where the vital sap is flowing; rust will not hinder the opening of a gate when the hinges are used each day.

Movement gives health and life. Stagnation brings disease and death."

- proverb in traditional Chinese Medicine.

BEGINNINGS

"My belief is in the blood and flesh as being wiser than the intellect. The body-unconscious is where life bubbles up in us. It is how we know that we are alive, alive to the depths of

our souls and in touch somewhere with the vivid reaches of the cosmos."
D. H. Lawrence.

Around the start of the 20th century, a final-year student of osteopathy, William Garner Sutherland, was examining a set of disarticulated bones of a human skull in his college laboratory. Like other students of his time, Sutherland had been taught that adult cranial bones do not move because their sutures (joints) become fused. However, he noted that he was holding in his hands adult bones which had become easily separated from each other.

Like the gills of a fish.

While examining the bevel-shaped sutures of a sphenoid and temporal bone, Sutherland had an insight which changed the course of his life. He described how a remarkable thought had struck him like a blinding flash of light. He realized that the sutures of the bones he was holding resembled the gills of a fish and were designed for a respiratory motion. He didn't understand where this idea came from, nor its true significance, but it echoed through his mind.

William Sutherland set out to try prove to himself that cranial bones do not move, just as he had been taught. As a true experimental scientist, he reasoned that if cranial bones did move and that if this movement could be prevented, it should be possible to experience the effect. So he designed a kind of helmet made of linen bandages and leather straps which could be tightened in various positions, thus preventing any potential cranial motion from occurring.

Cranial movement.

Experimenting on his own head, he tightened the straps, first in one direction and then in another. Within a short period of time he started to experience headaches and digestive upsets. This response was not what he was expecting, so he decided to continue his research to find out more. Some of his experiments with the "helmet" led to quite severe symptoms of cranial tightness, headaches, sickness and disorientation. Of particular interest was that when the helmet straps were tightened in certain other positions, it produced a sense of great relief and an improvement in cranial circulation.

After many months of pulling and restricting his cranial bones in different positions with these varying results, Dr Sutherland eventually stopped this research, having convinced himself that adult cranial bones do, in fact, move. Furthermore, the surprising responses that he felt in his own body had shown him that cranial movement must have some important physiological function. Sutherland spent the remaining 50 years of his life exploring the significance of this motion.

Historical acceptance.

Although most Western countries did not recognize cranial motion, this possibility was not new to other cultures. There are various Oriental systems of medicine such as acupuncture and Ayurveda which have long appreciated the subtle movements which occur throughout the body, caused by the flow of vital force or life-energy. This has also been traditionally taught in Russian physiology. Interestingly, anatomists in Italy in the

early 1900s were already teaching that adult cranial sutures do not fully fuse, but continue to permit small degrees of motion throughout life.

Cranial manipulation has been practised in India for centuries, and was also developed by the ancient Egyptians and members of the Paracus culture in Peru (2000 BC to 200 AD). Furthermore, in the 18th century, the philosopher and scientist Emmanuel Swedenborg described a rhythmic motion of the brain, stating that it moves with regular cycles of expansion and contraction.

Tissue breathing.

From an early stage, Dr Sutherland understood that he was exploring an involuntary system of "breathing" in tissues, important for the maintenance of their health. At a fundamental level, it is this property to express motion that distinguishes living tissues from those which are dead. Dr Sutherland perceived that all cells of the body need to express a rhythmic "breathing" in order for them to function to their optimal ability. Much of his research was carried out by combining a profound knowledge of anatomy along with an acute tactile sense. He started to realize that these subtle respiratory movements can be palpated by sensitive hands. He also discovered that this motion provided a wealth of clinical information.

An interconnected system.

Dr Sutherland recognized that the motion of cranial bones is connected to other tissues with which they are closely associated. The membrane system, which is continuous with cranial bones along their inner surfaces, is an integral part of this phenomenon. Significantly, Dr Sutherland also found that the central nervous system, and the cerebrospinal fluid which bathes it, have a rhythmic motion. The sacrum, too, is part of this interdependent system. Thus, there is an important infrastructure of fluids and tissues at the core of the body which express an interrelated subtle rhythmic motion.

As Dr Sutherland dug deeper into the origins of these rhythms, he realized that there are no external muscular agencies which could be responsible. He concluded that this motion is produced by the body's inherent life-force itself, which he called the *Breath of Life*.

THE BREATH OF LIFE

"Think of yourself as an electric battery. Electricity seems to have the power to explode or distribute oxygen, from which we receive the vitalizing benefits. When it plays freely all through your system, you feel well. Shut it off in one place and congestion results."
- Dr A. T. Still.

The inherent life-force of the body, the Breath of Life, was seen by Dr Sutherland to be the animator or spark behind these involuntary rhythms. Alluding to the source of this phenomenon, other practitioners have referred to it as "the soul's breath in the body". The Breath of Life is considered to carry a subtle yet powerful "potency" or force, which produces subtle rhythms as it is transmitted around the body. Dr Sutherland realized that the cerebrospinal fluid has a significant role in the expressing and distributing the potency of the Breath of Life. As potency is taken up by the cerebrospinal fluid, it generates a tide-like motion which is described as its *longitudinal fluctuation*. This motion has great

importance in carrying the Breath of Life throughout the body and, as long as it is expressed, health will follow.

Expressions of health.

The potency of the Breath of Life has remarkable properties for maintaining health and balance. An essential blueprint for health is carried in this potency, which acts as a basic ordering principle at a cellular level. This integrates the physiological functioning of all the body systems.

Dr Sutherland believed that the potency of the Breath of Life carries a basic Intelligence (which he spelled with a capital "I"), and realized that this intrinsic force could be employed by the practitioner for promoting health. A similar concept is found in many traditional systems of medicine, where the main focus for healing is also placed on encouraging a balanced distribution of the body's vital force.

The presence of full and balanced rhythms produced by the Breath of Life signifies a healthy system. As long as these rhythms are expressed naturally, the body's essential ordering principle is harmoniously distributed. Therefore, this rhythmic motion is primarily an *expression of health*. Its existence ensures the distribution of the ordering principle of the Breath of Life, and its restriction can have far-reaching consequences.

This brings us to two basic tenets of craniosacral work:

- 1) Life expresses itself as motion.
- 2) There is a clear relationship between motion and health.

Primary respiratory motion.

Dr. Sutherland named the system of tissues and fluids at the core of the body which express a subtle rhythmic motion, the *primary respiratory mechanism*. As these tissues are not under voluntary muscular control, they are also sometimes referred to as *the involuntary mechanism* (or I.V.M.). Dr. Sutherland used the term "primary" because this motion underlies all others. It is the manifestation of the life-stream itself. Every cell expresses this *primary respiratory motion* throughout its life. Significantly, many different symptoms and pathologies which involve both body and mind are related to disturbances of primary respiratory motion.

There are, of course, other vital rhythmic motions in the body such as the heartbeat and lung respiratory breathing. Although necessary for the maintenance of life, these are considered "secondary" motions because they are not the root cause of the body's expression of life. Without the Breath of Life there would be no other motion. Lung respiration or the breathing of air is therefore sometimes called *secondary respiration*.

This fact was proved to Dr Sutherland early on in his development of this work. During the days of prohibition in America during the 1920s, he was staying at a cottage on the shores of Lake Erie. One day he heard a commotion outside, when a man who had been drinking far too much illegal liquor was being dragged out from the water. By the time Dr Sutherland reached the shore, the man was lying on the ground. His normal life signs

(lung function and cardiovascular pulse) had ceased, and all attempts to resuscitate him had failed.

With some quick thinking, Dr Sutherland took hold of the sides of the man's head and encouraged a rocking motion of his temporal bones, in an attempt to stimulate primary respiratory motion. This worked; within a few seconds the man's breathing and heartbeat started up again and he regained consciousness. This experience helped to affirm to Dr Sutherland the tremendous power of working directly with the Breath of Life.

Sustained by the Breath of Life.

The expression of the Breath of Life at a cellular level is a fundamental necessity for good health. If the rhythmic expressions of the Breath of Life become congested or restricted, then the body's basic ordering principle is impeded and health is compromised. The main intention of craniosacral work is to encourage these rhythmic expressions of health. This is done by gently facilitating a restoration of primary respiratory motion in places where inertia has developed.

SPREAD OF THE WORK

"Nature heals, the doctor nurses."
- Paracelsus.

Dr Sutherland developed various therapeutic approaches to harness the intrinsic power of the Breath of Life and help resolve any restrictions to primary respiratory motion. He began to teach this work to other osteopaths from about the 1930s, and tirelessly continued to do so until his death in 1954. Challenging, as it did, some of the closely held beliefs among practitioners of the time, his work was at first largely rejected by the mainstream osteopathic profession. However, his clinical results in a wide range of cases were impressive and he began to attract a small band of osteopathic colleagues who wished to study with him.

In the 1940s the first osteopathic school in America started a post-graduate course called "Osteopathy in the Cranial Field" under the tutelage of Dr Sutherland. Soon after, others followed. This new branch of practice became known as *cranial osteopathy*. As the reputation of cranial osteopathy began to spread, Dr Sutherland trained more teachers to meet the demand. The most notable of these early teachers were Drs Viola Frymann, Edna Lay, Howard Lippincott, Anne Wales, Chester Handy and Rollin Becker.

However, even today, many osteopathic colleges still do not teach this work on their basic courses and so it is often studied as an option at post-graduate level. Consequently there are many practising osteopaths who do not use this approach. Nevertheless, in the last few years post-graduate training courses for practising osteopaths have become widely available.

Dr John Upledger.

In the mid-1970s Dr John Upledger was the first practitioner to teach some of these therapeutic skills to people who were not osteopathically trained. Dr Upledger had become drawn to exploring primary respiratory motion after an incident that occurred while he was assisting during a spinal surgical operation. He was asked to hold aside a part of the dural

membrane system which enfolds the spine, while the surgeon attempted to remove a calcium growth. To his embarrassment, Dr Upledger was unable to keep a firm hold on the membrane, as it kept rhythmically moving under his fingers. He took a post-graduate course in cranial osteopathy and then set out on his own path of clinical research. Over the years, Dr Upledger has done a great deal to popularize craniosacral work around the world.

When Dr Upledger began to teach non-osteopaths, he encountered great opposition from many in the profession who believed that the foundation of a full osteopathic training is necessary to practise the craniosacral approach. Many osteopaths are still of this opinion, and it continues to be a cause of much debate and argument. However, many also believe that this work can provide an integrated approach to health care in its own right and need not remain within the sole domain of osteopathic practice. Nevertheless, one thing is for sure: a good foundation in anatomy, physiology and medical diagnosis is necessary in order to apply craniosacral work with safety and competency. It also takes time and proper training to develop the necessary skills. It is an unfortunate fact that in recent years there are many people who have set up in practice with only minimal training.

Cranial osteopathy and craniosacral therapy.

It was Dr Upledger who coined the term "craniosacral therapy" when he started to teach to a wider group of students. Dr Upledger wanted to differentiate the therapeutic approaches he had developed and, furthermore, the title "cranial osteopath" could not be used by those new practitioners who were not osteopathically trained.

One question frequently asked is, "What is the difference between cranial osteopathy and craniosacral therapy?" Although Dr Upledger states that these two modalities are different, the differences are not always so obvious. They both emerge from the same roots and have much common ground, yet different branches have developed. A variety of therapeutic skills are now commonly used by both osteopaths and non-osteopathic practitioners of this work, so neither cranial osteopathy nor craniosacral therapy can be accurately defined by just one approach. However, in practice, craniosacral therapists often work more directly with the emotional and psychological aspects of disease.

Craniosacral biodynamics.

In the biodynamic view of craniosacral work an emphasis is placed on the inherent healing potency of the Breath of Life. In this approach, the functioning of the body is considered to be arranged in relationship to this essential organizing force. This has practical ramifications for the way in which diagnosis and treatment are carried out. This way of working also has a direct link to the pioneering insights of Dr Sutherland. It's interesting to note that during the latter years of his life, Dr Sutherland focused his attention more and more on working directly with the potency of the Breath of Life as a therapeutic medium. He saw that if the expression of this vital force can be facilitated, then health is consequently restored. Dr Rollin Becker, Dr James Jealous and Franklyn Sills have each added valuable insights into the operation of these natural laws which govern our health.

In the last 15 years there has been a huge increase of interest in craniosacral work. It is now taught and practised in many countries around the world. As this work is largely unregulated by law, professional associations have now been set up in many of these countries.