Pain Management Glasgow

How can The Bowen Technique help with chronic pain and pain management?

The Bowen Technique is a remedial therapy that addresses the full body and not just where pain occurs.

To have a better understanding of how The Bowen Technique can help people with chronic pain, we have to better understand how it can impact a person's nervous system.

Touch

Clients are often surprised by the gentle touch used in a Bowen treatment and even more surprised by the effects. Many people have been conditioned to believe in the 'no pain, no gain' mantra.

From a developmental perspective, babies cannot survive without human touch. Skin-to-skin contact has been shown to help regulate newborns' temperature, heart rate, and breathing, and decreases crying (Ferber, Feldman, & Makhoul, 2008).

A study examined the sensory deprivation of children in understaffed orphanages in Romania (Carlson & Earls, 1997). The touch-deprived children, had strikingly lower cortisol and growth development levels for their age group.

Physical touch, promotes cooperation between people, communicates distinct emotions, soothes in times of stress, and is used to make inferences of warmth and trust. An ethological study, with the National Basketball Association showed that early season touch predicted greater performance for individuals as well as teams later in the season. Additional analyses confirmed that touch predicted improved performance even after accounting for player status, preseason expectations, and early season performance (Michael W Kraus et al. Emotion. 2010 Oct).

A painful touch will set off alarm bells in the nervous system and will go to a part of the brain called the motor cortex that will trigger an emergency reaction, whereas gentle non-threatening touch - like we use in Bowen, will trigger a different part of the nervous system that is connected to a part of the brain called the insular cortex.

The insular cortex collects all sensory input and information regarding our blood pressure, digestion, heart rate, pain levels, and much, much more. It is also involved in motor learning, all emotional and life experiences, helps to regulate pain, and the main area that our Vagus nerve feeds into. It is constantly creating output, triggering other systems in relation to all of this input received. And that is why Bowen is so powerful - we tap into the insular cortex.

The Nervous System

Nerves are complex fibres which conduct electro-chemical impulses. Nerves to and from various parts of the body are grouped together within the spinal cord and transferred to the brain, which controls and co-ordinates the nervous signals involved in any bodily function - innumerable in even the simplest activity.

The nervous system can be divided into three: the *motor system* (for muscular control), the *sensory system* (for providing information to the brain from the senses), and the *autonomic nervous system* (which controls bodily functions which are not under conscious control, such as the digestive system).

The brain is divided into areas, each one of which controls one function or one area of the body. However, complex incoming sensory signals may be processed in more than one area of the brain at once - for example, visual signals are received in one part of the brain but interpreted in another.

A spinal nerve consists of many individual nerve fibres grouped together to connect with the spinal cord. The spinal nerve separates into individual nerves to control or sense stimuli in various parts of the body. (It is interesting to note that sensory signals heading towards the brain travel faster if they are pleasant rather than painful. “Kiss it better” is not just an “old wives’ remedy” - it actually works!)

A motor signal from the brain consists of an electrical impulse which flashes along the nerve, jumping the gaps between nerve cells - called *synapses* - on chemical carriers called *neuro-transmitters*. The signal is received at the muscle by *motor end plates* which stimulate the muscle fibres to contract, thus causing movement.

There are two separate systems within the autonomic nervous system, the *sympathetic* and the *parasympathetic*. The sympathetic system prepares the body for emergency action by reducing non-essential activities such as digestion. The sympathetic nerve signals are relayed from the *sympathetic ganglia* which form a chain along either side of the spine. Stimulation of these nerves leads to an increase in heart and breathing rates, increased blood supply to the muscles, and the dilation of the pupils of the eyes. Meanwhile, salivation, urine production and digestive activity are reduced.

The parasympathetic system emerges from the spine in the lower lumbar area and comes into play during rest and sleep, slowing the heart and breathing rates, constricting the pupils and increasing digestion.

**Nervous System summary taken from the Spinal Touch Manual*

The Nervous System & Trauma

The nervous system plays a crucial role in sending messages between the brain and body. When we experience trauma, such as an injury or emotional distress, the nervous system can become overwhelmed and imbalanced. Even after the initial wounds or issues have healed, the body's response to trauma can be long-lasting. This is because the nervous system retains the memories of the traumatic events, which can lead to ongoing pain, anxiety, and other lingering symptoms.

Bowen Therapy aims to rebalance the nervous system, aiding in its ability to release stored trauma and restore harmony to the body, by stimulating the nervous system and activating its inherent healing capabilities. This helps the body to reset and release tension, allowing the nervous system to gradually release trauma-related memories.

Healing from emotional trauma takes time and patience. It is important that anyone struggling with the lingering effects of past trauma, also seeks professional guidance and support.

Fascia

Fascia is a flexible, soft, yet sturdy connective tissue that permeates the human body, forming a continuous three-dimensional matrix of structural support. It interpenetrates, surrounds and supports our muscles, organs, nerve fibres and bones. Fascia plays a crucial role in maintaining our body's structural integrity, and also extends to the more fibrous connective tissues such as ligaments, tendons, aponeurosis, retinacula and joint capsules. Fascia keeps everything within the body separate, yet interconnected at the same time.

Sensory receptors (sensory nerves) are abundant within the fascial system. The sheer amount of sensory information being relayed through this network is greater than even that of vision. Fascia is the body’s largest sensory organ (Shleip 2011).

Sensory Receptors (AKA ‘Fascial Mechanoreceptors’)

There are five types of fascial mechanoreceptors which relay proprioceptive information:

Muscle Spindles

These are sensory receptors located in the belly of a muscle. They are both stretch and speed receptors. They can quickly relay data about both the speed and size of the changes in overall muscle length.

Golgi Receptors

These are proprioceptors found throughout the deep fascia, and monitor the tension levels in ligaments, tendons, joint capsules and aponeurotic attachment sites.

Pacini Receptors

Found in more tendinous tissues, mainly in the spine, Pacini receptors respond to sudden, rapid changes in pressure and vibration, by increasing both proprioception and motor control.

Ruffini Receptors

Found in the ligaments of peripheral joints, the dura mater (which surrounds and protects the brain and spinal cord), and the tissues associated with regular stretching, the skin and superficial fascia. They monitor vibration, pressure and especially shearing forces. When Ruffini receptors fire, the body is 'chilling out' and 'letting you in'. They are very sensitive to shearing forces and lateral stretch.

Interstitial Receptors

These are the most abundant and mysterious mechanoreceptors in the fascia. Also known as 'free nerve endings', they account for almost 80% of all sensory nerve fibres. Interstitial receptors are found nearly everywhere throughout the body. They surround hair follicles, they are inside bone, and everywhere in between.

They give the body constant feedback about mechanical changes of tension, stress, sensations, temperature and more. Some of these receptors perform autonomic functions and help regulate the heart rate, blood pressure and the regulation of blood flow. These receptors respond to extremely light pressure and also very heavy pressure. When stimulated, they increase proprioceptive sensitivity.

**Fascia and sensory receptor information, taken from 'Fascia What it is and why it Matters' David Lesondak*

Proprioception

Proprioception is the body's ability to sense its position, movements, and orientation in space. It involves receptors in your muscles, joints, and connective tissues that send information to your brain, allowing you to stay balanced, coordinated, and aware of your body's position without relying solely on your sight. It plays a vital role in creating functional movement patterns and preventing injuries.

Bowen Technique and Improved Proprioception:

1) Increases body awareness: The Bowen moves can heighten your client's perception of their body. By stimulating proprioceptive receptors, it can help to improve their overall body awareness and coordination.

2) Enhances sensory input: Bowen Therapy can amplify sensory input to the brain, allowing it to have a clearer understanding of the body's position, movements, and alignment. This increased feedback enables better coordination and movement efficiency.
3) Restores balance and alignment: Bowen can help address imbalances and tension in the body, which can negatively affect proprioception. Releasing these restrictions, can allow the body to function optimally and maintain better postural alignment.
4) Supports injury prevention: By improving proprioception, Bowen can help to reduce the risk of injuries. With enhanced body awareness, clients can more easily adapt to sudden movements, supporting stability, and preventing falls.

The Jars

The ‘jars’ performed during Shoulder, Hamstring and Ankle procedures, have a neurological effect on the body. When we perform the jar, we quickly shorten tendons that are attached to the muscles involved, eg. The Achilles tendon in both the Hamstrings and Ankle procedure. This shortening of the tendon is similar to when the doctor hits your knee with a small hammer to elicit an involuntary kick of the leg (Knee Jerk Reflex), this is also known as a 'Deep Tendon Reflex' ('DTR')

A Deep Tendon Reflex is traditionally used to assess the sensory and motor neurons involved, but it also has a neurologically calming effect on the body. The exact mechanism of this is not fully understood yet, but it has been shown to normalise a muscle’s Myotatic Reflex (how well a muscle responds to being stretched).
This is very significant in terms of Bowen Therapy, as it is one of the very few modalities that incorporates a Deep Tendon Reflex as part of its treatment protocol.

A 'DTR', administered after a series of Bowen moves, may help to restore mobility and range of motion, which decreases or eliminates pain, as well as restoring circulation to an inflamed area.

The Significance of Sleep

As Bowen Therapists, we will often hear a client say "I slept really soundly after my Bowen treatment !" This is great news, and a good sign that their body is beginning to respond to Bowen.

The pituitary gland within the brain sends out hormones during deep sleep, which help with healing, muscle repair and growth of new tissue. Improved Sleep patterns are therefore often observed prior to any other benefits following a Bowen session!

Glymphatics is the lymphatic system of the brain, it is responsible for removing toxins. These fluids drain from the brain into the sinuses and into lymph nodes located in the neck. It is therefore very important to keep these areas as clear and as open as possible in order to support brain lymphatics. The work we do with Bowen around the neck and jaw is absolute gold in supporting the glymphatic system.

The Importance of Hydration

Drinking water is essential not only for overall health, but especially after exercise, when it's hot outside or after a Bowen session. Clients should be encouraged to take regular sips throughout the day. It should be noted that water can also come from Food Sources. Milk, as well as fruits and vegetables with high water content, like watermelon, cucumbers, and oranges can also contribute hydration, as can soups, jellies and ice lollies, although products with artificial sweeteners should ideally be avoided.

Water:

1) Regulates Body Temperature:
   When the weather gets hot, our bodies naturally sweat to cool down. Sweat helps bring down our body temperature, but it also leads to fluid loss. By drinking water, the lost fluids are replenished, which helps regulate the body temperature effectively.

2) Aids in Recovery:
   After Bowen, the body goes through a relaxing and rejuvenating process. Drinking water helps the body flush out toxins and supports the healing process. It ensures that cells, tissues, and muscles receive the necessary hydration, allowing them to recover efficiently.

3) Enhances Cognitive Function:
   Dehydration can affect brain function and overall cognitive performance. Drinking water regularly, supports optimal brain function, concentration, and mental clarity. This can help clients stay focused and ensuring optimal productivity.

4) Promotes Healthy Skin:
   Water is essential for maintaining the elasticity and moisture of skin. When adequately hydrated, the skin appears more radiant, youthful, and plump. Staying hydrated helps prevent dryness, irritation, and encourages a healthy complexion.

Energy & Bowen Work

When we talk about movement of ‘energy’ during a Bowen session, we need to be clear what we are referring to. The Law of energy states that energy is neither created nor destroyed. It simply changes from one form of energy, into another.

ATP is generated from carbohydrates, fats and proteins. It is commonly referred to as the ‘energy currency’ of the cell, as it provides readily releasable energy. (ATP is ‘Adenosine triphosphate’ but you don’t need to remember what it stands for!)

During muscle contraction, chemical energy is converted by ATP into mechanical energy. This mechanical energy is then stored in the tissue or is used to perform external work. Stored energy is referred to as ‘potential energy’, and ‘kinetic energy’ is the energy of motion.

When we make a Bowen move, we are using that stored potential energy.

In summary, The Bowen Technique is a remarkable therapy that helps to start a natural rebalancing throughout a client’s body. Not just a physical rebalancing but also at an autonomic nervous system level. Clients often report feeling better within themselves or more grounded after a Bowen treatment.

Chronic pain is multifaceted. Being physically, mentally and emotionally balanced and grounded as possible is essential to help with your healing journey. Bowen Therapy might be able help you get to that place.