

## **The Effect of The Bowen Technique on Osteoarthritis Related Pain.**

The Bowen Technique is a gentle method of muscular and connective tissue manipulation developed by Tom Bowen in Geelong, Australia in the 1950's (Rentsch, 2013, pp vii-viii) The Bowen Technique prompts the body to activate the recovery process in order to facilitate a reduction in pain and regain function in many acute and chronic conditions.

Bowen moves are performed gently and specifically over muscles, tendons, fascia, ligaments, joints and nerves. The moves appear to activate a "Stretch Reflex" sending messages to the Central Nervous System. The moves are also believed to stimulate joint proprioceptors in order to encourage normalization of joint function. Bowenwork also has a direct effect on the body's connective tissue or fascia which can improve postural alignment and overall mobility and function. (Rentsch, 2013, p ix)

This research project aims to examine the effect that The Bowen Technique may have on alleviating pain associated with Osteoarthritis, as well as the potential for improving quality of life by improving sleep patterns, mobility and mood.

In Noosa where I live and practice, there are 7 BAA certified Bowen Therapists within 10km. Bowen Therapy is gaining popularity, but many people struggle to understand how it works and are unaware of the large number of conditions it is able to address.

Osteoarthritis (OA) is the most common form of arthritis and causes significant pain and disability. It is a degenerative disease where the cartilage which acts as a cushion between the bones begins to break down, the ends of the bones may thicken and bony growths or spurs known as Osteophytes can occur. These overgrowths may hinder joint movement. (Ali, p153) Swelling also occurs where excess synovial fluid is created by irritation in the joint. Pain, warmth and stiffness is felt typically first affecting the joints that are often used to bear the brunt of your weight such as knees and hips (Galer, p47) and will generally begin asymmetrically. Diagnosis is by assessing symptoms and is usually confirmed by GP with an x-ray.

Over time, those who suffer from osteoarthritis often become less mobile due to joint and associated muscular pain related to change in posture and alignment. This may lead to loss of strength and increased risk of falls. Sufferers may become sedentary which can lead to isolation and depression. Sleep is often affected. Constipation can become an issue - due to side effects of analgesic medication, reduced mobility and thus slower bowel peristalsis, and also due to dehydration - anecdotally I have had many clients tell me that they deliberately reduce the amount of water they drink as they have difficulty getting to the toilet quickly. This creates a vicious cycle involving dehydrated fascia, which of course continues the cycle of restricted connective tissue, reduced function and pain.



There are many nutritional supplements available which may give some relief of joint pain –Fish oil and Tumeric with their anti-inflammatory properties. Next Glucosamine may help restore and maintain healthy cartilage. (Galer, p54) Medications are also widely used to reduce inflammation and to block pain signals (Galer, p48). Many patients are unable to tolerate these medications due to side effects such as drowsiness, reducing liver and kidney function, drug interactions, nausea and constipation.

Bowen Therapy has the potential to improve the quality of life of those suffering from Osteoarthritis in many ways. I believe it will help rehydrate the fascia improving movement and improve mobility by working on joint proprioceptors allowing for normalization of joint function. It may change the pain/muscle spasm loop by activating stretch reflexes. It may facilitate detoxification improving function at a cellular level, and increase the lymphatic circulation and potentially help reduce swelling at joints and affected limbs. By activating the Parasympathetic Nervous System and allowing the body to switch off from a state of automatic overdrive that many people suffering from chronic pain are in ( Wilks, 2007, pp91-93), Bowenwork may calm the body and allow for improvements in quality and quantity of sleep. Those suffering from constipation may note improved bowel function due to improved hydration, increased mobility and reduction in pain medication required to achieve relief.

My goal is to assess and treat 5 individuals with medically diagnosed Osteoarthritis in a variety of joints. The subjects were identified by local GP's as having inadequate pain control and were asked if they were willing to participate. In order to accurately assess the possible changes initiated by the Bowen Therapy treatments, I have chosen to use a Qualitative Method. The clients were asked to complete a consent form (appendix 1), client history sheet (Appendix 2) and self-assessment tool (appendix 3) at the beginning of the study along with an objective assessment then were re-assessed one week following the completion of their treatments. Each subject was treated 4 times over the period of 4-6 weeks. They were asked not to participate in any other physical therapy in this time, and were encouraged to drink ample water.

## STUDY SUBJECTS / RESULTS

### **Subject 1**

74 year old female had suffered from arthritis pain for 20 years bilaterally in her feet, hands, neck and lumbar spine. She has had knee replacements. She had right plantar fasciitis and bilateral carpal tunnel symptoms.

Pre-study, this lady rated her daily pain level as 3-4 (very painful-extreme) for lumbar and feet pain.

She took 2 painkillers twice a day.

She reported having 4-5 hours sleep a night and believed that her arthritis pain does interfere with her sleep, mobility, mood and her social life.

She rated that the stiffness she felt in her feet daily was 3 (very stiff)– she was unable to walk barefoot in her house due to the pain.



## Results -

Post treatment, this lady was surprised and happy that she felt "better overall". Average pain had improved to 2 (moderate), she was now taking 2 painkillers once a day.

Her sleep had improved to 6 hours a night and it was easier to fall asleep.

Her mobility was still affected, but she found walking far easier and was thrilled that she was able to walk barefoot at home without severe pain.

She reported an improvement in stiffness now rated as 2 (moderately stiff). Her mood and social life was now no longer affected by her arthritis.

Her chronic constipation had improved and she was no longer using an aperient everyday.

On examination, her lumbar flexion had improved from 80 degrees to 90 degrees. Pre-study, her right leg sat 2cm longer than her left leg and splayed laterally when she lay prone, after the 2<sup>nd</sup> treatment this had resolved and had continued to hold and remained level at the final treatment.

**Subject 2** - 79 year old female who had suffered with arthritic pain in her back and hips for 30 years, and pain in her right wrist and thumb for 2 years. She suffers with anxiety and rarely leaves the house, and relies on her daughter for transport and social contact. She was unable to hold any weight with her right hand - including a cup of tea.

Initially, this lady rated her pain level in her wrist as 4 (severe) and back/hips as 3 (very painful) when moving.

She took 2 painkillers 3 times a day.

She rated her stiffness as 4 for her wrist (severely restricted) and for her back/hip as 1-4 (slight to severe) depending on the day, and often required the use of a walking stick as support as she felt her hip was collapsible at times.

She slept 7 hours a night and felt her arthritis did not affect her sleep.

The wrist flexion of her right hand was very restricted when compared with her left hand. Her right leg was 2cm shorter than her left and her right gluteal palpated as tight.

## Results -

Post study, this lady reported improvement in her hip/back pain - she no longer relied on the use of her walking stick and rated her hip pain as 2-3 (rating out of 4) and had reduced her painkillers to only once a day when required. She noted the stiffness in her back/hips had improved to a rating of 2. Her sleep was unchanged.

She did not believe she had any improvement in her wrist. Interestingly her right wrist flexion had improved from 50 degrees P1 to 60 degrees S1, and her right wrist extension had improved from 60 degrees S1 to 80 degrees S1.

A pea sized nodule on the dorsal aspect of her right hand had shrunk considerably since the first treatment.

**Subject 3** - 62 year old lady who worked in a busy clerical job. This lady had an extensive medical history including several long ago injuries leaving her with a plate and screws in her left shoulder, dislocations of her thumbs, fractured left ankle, osteomyelitis of her right hip and a fractured skull. She had a Baker's cyst



behind her knee and has lower limb swelling everyday with work as well as regular calf cramps. This lady currently suffers from pain related to her osteoarthritis in right hip, shoulders, hands and most severely her feet. Her arthritis pain did affect her sleep of 5-6 hours per night. She did not take painkillers but just put up with the pain. Her pain did affect her mood, social life and mobility with moderate stiffness generally. Despite her pain, she did continue to play tennis and walk but was finding this increasingly difficult. On examination this client had a pronounced kyphosis and lateral pelvic tilt with right leg 1cm longer when prone, and a positive Thomas Test.

#### Results -

This client was very pleased with her results with a large improvement in her mobility and feet pain generally - she was able to walk a great deal further without pain and felt generally less stiff and "better all over". She had noticed decline in her lower leg swelling with no leg swelling since her 3<sup>rd</sup> treatment. She reported improved mood and social life.

She had improvements (up to 20 degrees) in her lateral neck rotation and lumbar flexion improved from 45 degrees S1 to 80 degrees.

Her leg length discrepancy did not resolve and Thomas Test remained positive. Her average level of daily pain reduced from 3 (very painful) to 2 (medium pain). Her sleep quality had improved but quantity had remained the same. Her stiffness had improved from moderate to slight - she reported she had no pain in her left foot despite long term pain since an ankle fracture and fracture of the dorsal surface many years ago. Slight stiffness remained in her right arch. She reported being able to walk further and stand for longer at work.

**Subject 4** - 63 year old lady with an 18 month history of thoracic spine Osteoarthritis. She had a pronounced kyphosis.

She reported an average pain level of 2 (medium) sleep getting only 4-5 hours sleep a night - she described waking up to 13 times at night. She took up to 2 painkillers per day and reported her arthritis pain slightly affected her mobility with moderate stiffness after walking. She was unable to sit with legs fully extended on the floor and her feet flat against a wall. She also reported difficulty fully extending her arms at the elbow joint. Her mood was affected by her symptoms, but not her social life.

#### Results -

There was a massive improvement in her sleep patterns with up to 4 hours solid sleep at a time with 7-8 hours every night now. Her posture had improved and she felt as though she was sitting much taller and straighter than previous. She was able to fully extend both legs when sitting and elbow extension had improved.

Her average daily pain level was unchanged, but felt no stiffness in her joints when mobilizing now. She had not required or used any painkillers during the treatment period. She reported that her arthritis no longer affected her mood.



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**Subject 5** – 64 year old lady who has suffered with degeneration in her cervical and lumbar spine and related tightness and pain through her neck, trapezius and shoulders for many years. She does not take painkillers for her pain, but prefers to manage without. She reported an average level of daily pain as medium (2) and ease of movement in her neck as slight stiffness. She averaged 5-6 hours sleep per night, reported her arthritis did affect her sleep. Her arthritis did not affect her mood, social life or mobility, but she felt it affected her ability to perform hand sewing/patchwork.

#### Results -

This client reported an improvement in her pain, stiffness and sleep. Her pain level improved to 2 (slight) pain and she stated improved the quality of her sleep but not quantity. She had no stiffness or pain in her neck with lateral rotation, lateral flexion and extension which was there previously and range of movement had improved.

There was consistency noted with results in these 5 subjects of general improvement in pain level, stiffness, range of movement, with improved sleep and improved general ability to cope with their arthritis symptoms. Bowen Therapy certainly helped all of these women improve the quality of life being able to perform tasks and activity more easily than they had previously been able to – for some, this had a positive effect on their mood and social life. Although Bowen Therapy like all other conventional treatments for Osteoarthritis, is unable to reverse the effects of OA on the body, Bowen is able to help improve the quality of life of those suffering without adding in additional side effects.