## How does Fascial Kinetics, a Bowen Therapy work? The role of fascia in Bowen therapy.

One of the effects of the Bowen move is on the *fasciae* of the body. Fascia is a soft tissue component of the connective tissue that permeates and connects all the other tissues of the body. Fascia extends to all fibrous connective tissue, including aponeuroses, ligaments, tendons, retinaculae, joint capsules, organ and vessel tunics, the epineurium, the meninges, the periosteal, and all the endomysial and intramuscular fibres of the myofasciae.

Connective tissue (fascia) consists of ground substance and fluid, cells and fibre. How does the Bowen move affect each of these?

The fluid like ground substance is made up of tree like molecules of *Proteoglycans* (PGs) with branches of *Glycosaminoglycans* (GAGs) which bind water and give fluidity to fascia. If fascia becomes dehydrated the tree like branches of the PG's and GAG's collapse and hence 'glue' the fascia. The ground substance is also considered an organic crystalline structure which when stimulated by pressure, like a Bowen move, has the capacity to generate tiny electrical fields known as *piezoelectricity*. As piezoelectricity increases PG's and GAG's up-take water molecules thus rehydrating the ground substance and encouraging nutrient and waste exchange with cells. This increase in the fluidity of fascia is known as *thixotropy*. It's theorised the Bowen move sends a 'ripple' through the fascia to encourage thixotropy to 'free up' the fascia.

The primary cells of fascia are fibroblasts which produce the fibres of collagen, reticulin and elastin. On expulsion from fibroblasts, collagen molecules join together to form collagen fibrils through a process known as 'hydrogen ionisation bonding'. This mechanism not only binds collagen molecules for fascial strength but also binds water molecules. When dehydrated, collagen fibrils tend to stick together and hence limit flexibility especially around ligaments and tendons. The Bowen move may mechanically pulls collagen fibrils apart and restore to normal the *critical interfibre distance* between fibrils. But more importantly the moves may encourage the rehydration of collagen fibres supplementing the thixotropic effect on PG's and GaG's. Recipients of Bowen technique often have more freedom of movement at joints.

Thus when dehydrated, collagen fibres tend to stick together and the ground substance thickens, hence 'gluing' the fascia and by association muscle, nerve and epithelial tissue. Movement of tissues is restricted, as is the flow of cellular nutrients and waste. This 'gluing' in muscles gets labelled as 'knots', 'ischemic tissue' or 'trigger points'. The Bowen move encourages *thixotropy*, mechanically pulls apart stuck collagen fibres, thus freeing all other tissues.

Given that fascia is very invested with many sensory receptors (90% of free nerve endings are in the superficial fascia under the skin), neurobiological processes also occur to enhance feedback mechanisms to the fascia and surrounding tissues such as muscles. The relaxation response is enhanced via the parasympathetic nervous system. The Bowen moves may act on these mechanisms.

The Bowen move is also thought to act on the energetic systems of the body to enhance energy flows of 'chi' ('prana', 'spirit') to encourage homeostasis. There is a high correlation to the location of Bowen moves and acupressure / acupuncture points. The

conduit of acupuncture meridians is theorised to be through the fascia and the 'ripple effect' of the Bowen move may act on these.

Since the hydration of fascia affects nerve transmission, nutrient uptake and waste removal, then the effects of pharmaceuticals and other substances such as illicit drugs, herbs, supplements and homeopathy are enhanced. The drugs and remedies will act faster to alter cell function, bringing nutrition to cells and encouraging detoxification to enable healing at the cellular level. Thus dosages may need to be monitored when Bowen moves are applied to avoid an excessive response to a substance.