## **Physiological Effects of AVAZZIA BEST<sup>TM</sup>**

## **C-nerve fiber release of neuro-peptides**

- Increased perfusion
- Pain reduction
- Accelerate wound healing

## **Therapeutic Physiological Effect**

AVAZZIA devices generate various forms of damped sinusoidal micro-current signals that utilize the impedance characteristics of tissue. A constantly changing cybernetic biofeedback loop is established between the tissue of interest and the device via electrode or TENS pads. (Note: AVAZZIA devices are not traditional TENS devices) Pathological conditions existing in the tissue determine the impedance of the return signal and alter the emitted signal from the next pulse.

AVAZZIA's BEST<sup>TM</sup> signaling specifically affects afferent un-meylinated C-nerve fibers. C-fibers are neuro-secretory. When stimulated, neuro-peptides (NP) such as endorphins and enkephalins, known to block pain, are secreted locally. This leads to prolonged NP cascades which is both local and systemic in effect and continues for up to twelve hours post treatment. The afferent nerve signaling ascends the spinal cord tracts to higher brain centers to stimulate the release of nitric oxide (NO), serotonin and other neuro-transmitters, leading to a descending endorphin blockade at the afferent root of initial entry into the spine. The results are local pain blockade as well as central nervous system blockade, which is systemic in its effect.

Another profound effect is the release of Vaso-active NPs and NO which increase blood circulation to an area of therapeutic interest. Improved hemo-perfusion and lymphatic drainage are exceptionally useful attributes for therapeutic application. Higher levels of oxygen and nutrients necessary for healing will dramatically accelerate tissue recovery, especially wounds.

Similar technology has been in development and widely used in areas of Asia and Europe for the last twenty years as a primary treatment for acute trauma, pain, chronic non-healing wounds, musculoskeletal injuries or conditions, orthopedic injuries where improved perfusion is needed, erasure of traumatic tissue memory (PT term). It is currently being used and prescribed by over 200 doctors in the US. Over two thousand patients in the USA have been treated with good result. Chiropractors and physical therapists are also beginning to utilize the device extensively.

Some of the therapeutic uses of BEST<sup>™</sup> technology reported as effective by doctors in other countries include erasure of tissue traumatic memory, improved perfusion, reduction in post surgical and traumatic edema, accelerated healing time, full return or improved functionality of traumatized or damage tissues, total abatement or reduction in pain to name a few.