



Wellness at Work
forensic bodywork

Introduction from Dr Paul Crozier.

Retired. Former Medical Director A&E Ascot White Cross Remeura. Medical Director Bodywall Ltd.

Repetitive stress on the body whether through emotional and physiological insults or physical injury initially evokes a protective response but unless this mechanism is ameliorated it will leave its mark on the body and the psyche; in the former as a variety of syndromes as diverse as endometriosis and Rotator cuff syndrome and in the latter chronic pain syndromes.

Recognising a commonality of cause and effect in the body's response is the key to first alleviating further adverse changes and ultimately to undo these changes.

The therapies offered here work with the physiological changes not against them essentially telling the body to switch off unneeded responses.

Last but not least they comply with the dictum 'primum non nocere' first do no harm.

Dr Paul Crozier.

The Laws of Physiology and how they relate to Wellness at Work "Forensic Bodywork" treatments.

There are a number of 'laws' that the body uses in order to function, understanding these laws can improve your comprehension of what is occurring when you are sore, injured or attempting to treat an injury. When we set out to design the entire Wellness at Work Forensic Bodywork rehabilitation and training systems we used these laws to provide us with clear directions in developing technologies that would deliver safe rapid outcomes.

Wellness at Work Therapies, Bodywall®, Bodytool®, ScarsAway®, TBT® and Forensic Pelvic Pain Treatment® all take advantage of these laws or scientific principles to obtain rapid change for a wide range of natural physiological occurrences. Delivering effective No Change No Charge guaranteed treatments for a number of pathologies considered intractable in conventional medical practice.

Law of Facilitation

When an impulse has passed through a certain set of neurons to the exclusion of others, it will tend to take the same course on a future occasion and each time it traverses this path the resistance will be less. The nervous system conditions itself to the path of least resistance and the body then reproduces habitual patterns when a

neural pathway is activated. What occurs then is old injuries tend to get re-aggravated, with far less stimulation than was required for the original injury.



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Once a patient is attached to the Bodywall we are able to create loadings within the skeletal structure in the hundreds of kilogram range. We can safely and accurately reproduce loadings to simulate sporting activity or work tasks, far above the load ranges normally experienced. This allows us to rapidly reprogram new pathways resetting the existing proprioceptors positions to healthy new patterns.

Hiltons Law

A nerve trunk that supplies a joint also supplies the muscles of the joint and the skin over the attachments of such muscles. Therefore if an injury occurs it may be difficult to determine if the pain is coming from the skin, muscle or joint. Stimulation of all areas in turn affects each part. That is why we may need to address an area that may not seem to be directly involved, in order to affect the issue at hand, and working superficially on the body will often create a deeper release of tissues.

By stimulating the superficial structures, all of structures supplied by that nerve trunk are affected. Scar tissue from injury or surgery can disrupt nerve signal transmission well away from the original injury site. This is why we treat all and any scars surrounding an injury with a ScarsAway® or Bodytool® and why these small treatments can have such strong effects over wide areas.

Arndt-Schultz Law

Weak stimuli activate physiological processes: very strong stimuli inhibit physiological responses. Doing deep tissue slowly and gently is generally more effective than using force or doing nothing, as tissue that is gently agitated will heal faster than tissue that is left alone, plus weak stimulus also activates tissue growth and wound healing. However trigger points that give off strong impulses can turn off other processes in the body and to turn off a response you need to use stronger stimuli.

When correctly applied Bodytool® can produce stimuli far in excess of conventional deep tissue massage and other tools 'without eliciting a pain spasm response', this allows for the total amount of force required to be applied to be applied in much shorter time frames significantly reducing the overall stress on the tissue, producing more rapid tissue releases and shorter recovery times.

Davis' Law Says that soft tissue will model itself to meet imposed demands, so if soft tissue is placed under unremitting tension, the tissue will elongate by adding more material. This shows up in muscle imbalances where one set of muscles have shortened and while the opposing muscles have weakened in response to their being stretched beyond normal. A person with rounded or forward rolled shoulders will have tight, pectoral muscles while their rhomboids between their shoulder blades will be weak. The short answer is, Use it or lose it, if you don't the body will break the tissue down and use it elsewhere!

When a patient being assessed rehabilitated or trained on a Bodywall® the therapist has several hundred functional exercises available. This permits observation of imbalances under functional load 'in real time' this allows us to rapidly adjust the exercise or movement so the patient can place correct and accurate load onto the injured tissue and remodelling can commence even during the assessment phase.

All or None Law

The weakest stimuli capable of initiating a response, triggers an impulse that is transmitted along the entire neuron or muscle fibre, producing maximum strength response in cardiac and skeletal muscles and nerves. What this means is a little can go a long way to produce a response. When muscles contract all the fibres of the muscle must contract for optimal functioning, if there are myofascial adhesions and scar tissue in the muscle it reduces the effectiveness of the muscle dramatically.

Both Bodytool® and ScarsAway® take advantage of a property in Myofascia in that it is 'thixotropic' so it will change state and liquefy when shaken or disturbed. This means out trained therapists can rapidly release deep myofascial adhesions in tissue, including those bound into hydrogen collagen helix such as strong scar structures, even adhesions that are attached to the bone.

Pfluegger's Laws

Explain the body's transition from an acute pain syndrome to a chronic pain syndrome because a trauma to one part of the body if left untreated, can progress into a chronic full body condition. The body responds to trauma initially at the site of the injury however if the stimulation is sufficient a reaction can be manifested in similar muscles on the opposite side of the body.

By using increasing levels of treatment intensity such as a Bodywall high intensity stretch, a bilateral effect can be created even if treating only one side of the body. By treating the unaffected side, the painful areas can be addressed without directly working on them.

If the excitation continues to increase, it is propagated upward and reactions take place through centrifugal nerves coming from the cord segments higher up. Stimulation will move up the spinal column and trigger reactions in the corresponding body areas innervated by those nerve segments. There may be spasms and pain above the actual site of the injury to protect the injured area. If the irritation becomes very intense it can be propagated in the medulla oblongata, causing a general contraction of all muscles of the body.

Very intense conventional massage application can trigger whole body muscular contractions (massive muscle guarding). This is what trauma does to the body



creating intense, generalized whole body muscular contraction. *Using Bodytool and ScarsAway does not trigger this response so the muscle guarding and pain avoidance ENGRAMS that have been developed can be rapidly released.*

Law of specificity of nervous energy

Excitation of a receptor always gives rise to the same sensation regardless of the nature of the stimulus, no matter which method you use to activate a sensory receptor; it will respond in a specific manner. The goal is to activate the receptor in order to achieve a response. If the receptor can be stimulated by something simple, it is not necessary to do any more stimulation to the body.

When treating burns survivors they will describe a 'burning sensation' as the ScarsAway® releases contractures within the derma. Once the dermal nociceptors have been triggered they begin to relax and tissue immediately begins remodelling and flattening. The same applies for all severe injury with patients often reporting the 'exactly the same pain' as the original injury during treatment.

Weber's Law

The increase in stimulus necessary to produce the smallest perceptible increase in sensation bears a constant ratio to the strength of the stimulus already acting.

*If you have strong pain at a site a gentle rub or stretch will not do the job. However just a little bit more stimulation than what is already present, will change the perception. Guided by a professional a patient on a Bodywall can safely apply several hundred kilos of force to an injury site and when combined with Bodytool and ScarsAway therapies can alter or change a sensory perception. A trained therapist must ensure the intensity of the application matches and then 'just' exceeds the existing sensation. **To overcome a sensation of strong pain you need to apply pressure that matches and then 'just' exceeds the existing sensation.***

Law of conservation of energy

Energy is constant: it is neither created nor destroyed, but only transformed from one form or another.

When a traumatic event such as a motor vehicle accident occurs, the energy of the force of the car is absorbed by the bodies shock absorber Myofascia. Healing is achieved by releasing this energy from these tissues and hands will simply not do the trick. As with Webbers Law, to overcome these sensations of strong pain, you need to apply pressure that matches and then 'just' exceeds the existing injury.

Murphy's Law

If something can go wrong it will.

Never assume that something will never happen to you. This is especially true when looking at issues that arise in the therapeutic relationship. The advantage of our treatments methods is that when it does go wrong, we can help you find your way back to the actual cause, by back tracking and rechecking for what has been missed. Using Bodywall® Bodytool® ScarsAway® TBT© and Forensic Pelvic Pain Treatment® we can locate the original to help you get back on the recovery process.