McLoughlin Scar Tissue Release Technique

Additional reading for McLoughlin Scar Release practitioners
MCLOUGHLIN SCAR TISSUE RELEASE TECHNIQUE

Who can use it? – ANY bodywork practitioner can use this work….

- Massage therapists
- Physiotherapists
- Chiropractors
- Osteopaths
- Rolfers
- Rehabilitation therapists
- Pilates instructors
- Yoga teachers
- Reflexologists
- Bowen practitioners

The McLoughlin Scar Tissue Release Technique was devised and developed by the author.

It isn't massage work.
It isn't deep friction work.
It isn't fascial release work.
It isn't Bowen technique work.

Due to these differences and its unique method for the treatment of scar tissue I decided (or more precisely, other people encouraged me) to make it identifiable with myself. Hence the name: McLoughlin Scar Tissue Release Technique.

One of the most outstanding features of this work is that results obtained with this method are reliable and long-lasting.
Whenever you normalise scar tissue it does NOT revert back to its former state.
This is because I believe we are fundamentally changing the arrangement of collagen filaments in the dermis and epidermis.
In my experience of teaching bodywork over many years I think it is fair to say that specific treatment for scar tissue has been a neglected area.

Scar tissue is often observed but until now a really quick, specific and easy-to-learn method of the treatment of scar tissue was missing.

The effects of post surgical scars on the human body cannot be underestimated, although they frequently are.

The body forms scar tissue as a natural response to trauma when the skin is punctured or lacerated either by accident or purposefully – i.e. surgery.

Collagen is laid down in the repair process which results in a thickened, fibrous mass which impedes the proper circulation of blood and congests lymph flow.

Additionally, the severing of delicate nerve tissue often results in dysthesia of not only the scar but the adjacent, surrounding tissues.

As the scar is fibrous and non-elastic it will have a dragging and pulling effect on the surrounding tissues including joints. This will be experienced as a restricted range of motion, where greater than usual force needs to be applied in order to move the affected joint or joints.

With abdominal surgery the resulting scar tissue has a ‘dragging’ and a pulling feeling deep in the abdomen that can have an inhibitory effect upon flexion, extension and rotation of the spine.

As abdominal muscles work synergistically with spinal musculature you can be sure that abdominal scarring has a major impact on low back pain.

Any treatment for low back pain should include treatment for scar tissue, if this is present, as any treatment will be incomplete. Ignoring scar tissue within any treatment plan for back pain is unwise.

As a result the surrounding tissues and structures may experience the following symptoms and effects:
• Numbness
• Tingling
• Pain
• Burning
• Itching
• Hypersensitivity
• Muscle and tissue wastage (atrophy)
• Postural distortion
• Reduced range of motion
• Loss of flexibility
• Feeling of coldness
• Feeling of ‘disconnection’ between lower and upper parts of the body
• Feeling of nausea

These symptoms may persist for decades after surgery with the loss of sensation being an ongoing experience to the patient that interferes with daily life.

There is an acceptance by the patient that the scar will never change and that normal feelings or sensations in the scar and surrounding tissues will never return.

The client/patient is often unaware of the implications and effects of scar tissue in the body and do not see the necessity of addressing this area.

The Tensegrity model of the human body explains that internal tensions of the body help support the structure. Distortion of these tensions alter the structure.

As a bodyworker you will already be aware that muscle has a grain – fibres organised in a unified direction. Fascia also has direction although the various layers of fascia also make it a multi-directional tissue. When surgery (or serious trauma) takes place then scar tissue is laid down in a
disorganised, random way with collagen fibres misaligned and pointing in various directions.

So consider what happens when, over time, scar tissue shrinks thus creating unequal tensions within the structure of the body. As we have said, these distortions affect blood flow, restrict movement and create inflammation. Imbalances in the mechanical function of the skeletal structure surely follow with, over more time, deformation of the joints – also known as arthritis.

"Since connective tissue plays an intimate role in the function of all other tissues, a complex connective tissue network system integrating whole body mechanical forces may coherently influence the function of all other physiological systems.

Connective tissue bioelectrical, cellular and tissue plasticity responses, as well as their interactions with other tissues, may be key to understanding how pathological changes in one part of the body may cause a cascade of 'remote' effects in seemingly unrelated areas and organ systems. Connective tissue may be a key missing link needed to improve cross-system integration in both biomedical science and medicine."


SCAR TISSUE AND THE MERIDIAN SYSTEM

The effect of scar tissue to the flow of energy through the acupuncture pathways cannot be minimised. Scar tissue may be viewed as a ‘road block’ to the flow of Chi/Qi.

Therefore the practitioner needs to be aware of

a) The effects of the scar in remote areas of the body that may be the result of reduced energy flow

b) The effects in remote areas of the body that may be the direct result of the scar tissue work

Let’s take the example of a transverse scar on the abdomen - such as C-section or hysterectomy scar. When we look at a diagram of the meridian system we are immediately aware that major pathways are bisected by that scar.
SCAR TISSUE TECHNIQUE AND EMOTIONAL RELEASE

Every scar on the body is the result of some kind of trauma. A hole was created in the body that wasn't supposed to be there. The body repaired the wound as best it could but there was inevitable scarring.

When using this scar tissue technique you may find an increase in the frequency and regularity of emotional response. This is often released as crying and tearfulness - but occasionally laughing may also be the client’s response to the scar work.

C-SECTION SCAR BISECTS:
- Stomach
- Spleen/pancreas
- Kidney
- Liver
- Gall Bladder (if the scar is long)
- Conception Vessel (not shown)
Some types of scar may be more predictable than others in producing an emotional response. These may include - but are not limited to:

- Hysterectomy scars
- C-Section scar (and even more specifically, the emergency C-Section)
- Mastectomy scars
- Amputation scars
- Spinal surgery scars such as discectomy
- Underlying scar tissue from laparoscopic surgery and hysterectomy for example

“EVERY SCAR ON THE BODY IS THE RESULT OF SOME KIND OF TRAUMA.”

Other scars that seems quite innocuous may also illicit an emotional response. So always ASK the client: How did they acquire the scar? Their story may supply some insight into whether there is an emotional component to their scar.

If the client feels overwhelmed with emotion always give them the chance to quit the session.

With scars that seem to hold much emotional trauma I recommend you apply my technique ALONE on the day. Do not mix it with any other forms of bodywork such as massage, Bowen etc..

**Indications for use:**

Any post-surgical scar

Any scar resulting from an injury or trauma

Leave at least 8 weeks before treating the scar to enable healing to take place. If the scar still has not healed well after that time then leave for another month or two before commencement of treatment. Leaving the scar to heal a little longer will not reduce the efficacy of the treatment or inhibit the outcome.

Alastair McLoughlin LCSP(Hon.), BTAA
MCLOUGHLIN SCAR TISSUE RELEASE TECHNIQUE -

Additional information:

Scar

A scar is an area of fibrous tissue that replaces normal skin after an injury. Scars result from the biological process of wound repair in the skin, as well as in other organs and tissues of the body. Thus, scarring is a natural part of the healing process. With the exception of very minor lesions, every wound (e.g., after accident, disease, or surgery) results in some degree of scarring. An exception to this are animals with complete regeneration, which regrow tissue without scar formation.

Scar tissue is composed of the same protein (collagen) as the tissue that it replaces, but the fibre composition of the protein is different; instead of a random basketweave formation of the collagen fibres found in normal tissue, in fibrosis the collagen cross-links and forms a pronounced alignment in a single direction.[1] This collagen scar tissue alignment is usually of inferior functional quality to the normal collagen randomised alignment. For example, scars in the skin are less resistant to ultraviolet radiation, and sweat glands and hair follicles do not grow back within scar tissues.[2] A myocardial infarction, commonly known as a heart attack, causes scar formation in the heart muscle, which leads to loss of muscular power and possibly heart failure. However, there are some tissues (e.g. bone) that can heal without any structural or functional deterioration.

Types

All scarring is composed of the same collagen as the tissue it has replaced, but the composition of the scar tissue, compared to the normal tissue, is different.[1] Scar tissue also lacks elasticity[3] unlike normal tissue which distributes fiber elasticity. Scars differ in the amounts of collagen over-expressed. Labels have been applied to the differences in over-expression. Two of the most common types are hypertrophic and keloid scarring,[4] both of which experience excessive stiff collagen bundled growth overextending the tissue, blocking off regeneration of tissues. Another form is atrophic scarring (sunken scarring), which also has an over-expression of collagen blocking regeneration. This scar type is sunken, because the collagen bundles do not overextend the tissue. Stretch marks (striae) are regarded as scars by some.
High melanin levels and either African or Asian ancestry may make adverse scarring more noticeable.\[5\]

**Hypertrophic**

**Hypertrophic scars** occur when the body overproduces collagen, which causes the scar to be raised above the surrounding skin. **Hypertrophic** scars take the form of a red raised lump on the skin. They usually occur within 4 to 8 weeks following wound infection or wound closure with excess tension and/or other traumatic skin injuries.\[4\]

**Keloid**

Keloid scars are a more serious form of excessive scarring, because they can grow indefinitely into large, tumorous (although benign) **neoplasms.**\[4\] Hypertrophic scars are often distinguished from keloid scars by their lack of growth outside the original wound area, but this commonly taught distinction can lead to confusion.\[6\] Keloid scars can occur on anyone, but they are most common in dark-skinned people.\[7\] They can be caused by surgery, accident, **acne** or, sometimes, **body piercings.** In some people, keloid scars form spontaneously. Although they can be a cosmetic problem, keloid scars are only inert masses of collagen and therefore completely harmless and not cancerous. However, they can be itchy or painful in some individuals. They tend to be most common on the **shoulders** and **chest.** Hypertrophic scars and keloids tend to be more common in wounds closed by secondary intention.\[8\] Surgical removal of keloid is risky and may exacerbate the condition and worsening of the keloid.

**Atrophic**

An atrophic scar takes the form of a sunken recess in the skin, which has a pitted appearance. These are caused when underlying structures supporting the skin, such as **fat** or **muscle**, are lost. This type of scarring is often associated with **acne**,\[9\][10] **chickenpox**, other diseases (especially **Staphylococcus** infection), surgery, certain insect and spider bites, or accidents. It can also be caused by a genetic **connective tissue** disorder, such as **Ehlers–Danlos syndrome.**\[11\]
Stretch marks

Stretch marks (technically called *striae*) are also a form of scarring. These are caused when the skin is stretched rapidly (for instance during pregnancy, significant weight gain, or adolescent growth spurts), or when skin is put under tension during the healing process, (usually near joints). This type of scar usually improves in appearance after a few years. Elevated corticosteroid levels are implicated in striae development.

Umbilical

Humans and other placental mammals have an umbilical scar (commonly referred to as to a navel) which starts to heal when the umbilical cord is cut after birth; in addition to placental mammals, egg-laying animals have an umbilical scar which typically disappears within a few days after birth or remains visible for life depending on the species.

Pathophysiology

A scar is the product of the body's repair mechanism after tissue injury. If a wound heals quickly within two weeks with new formation of skin, minimal collagen will be deposited and no scar will form. Generally, if a wound takes longer than three to four weeks to become covered, a scar will form. Small full thickness wounds under 2mm re-epithelise fast and heal scar free. Deep second-degree burns heal with scarring and hair loss. Sweat glands do not form in scar tissue, which impairs the regulation of body temperature. Elastic fibers are generally not detected in scar tissue younger than 3 months old. In scars rete pegs are lost through a lack of rete pegs scars tend to shear easier than normal tissue.

The endometrium, the inner lining of the uterus, is the only adult tissue to undergo rapid cyclic shedding and regeneration without scarring; shedding and restoring roughly inside a 7-day window on a monthly basis. All other adult tissues, upon rapid shedding or injury, can scar. Prolonged inflammation, as well as the fibroblast proliferation can occur. Redness that often follows an injury to the skin is not a scar, and is generally not permanent (see wound healing). The time it takes for this redness to dissipate may, however, range from a few days to, in some serious and rare cases, a few years.
Scars form differently based on the location of the injury on the body and the age of the person who was injured. The worse the initial damage is, the worse the scar will generally be. Skin scars occur when the dermis (the deep, thick layer of skin) is damaged. Most skin scars are flat and leave a trace of the original injury that caused them. Wounds allowed to heal secondarily tend to scar worse than wounds from primary closure.[8]

Collagen synthesis

Any injury does not become a scar until the wound has completely healed; this can take many months, or years in the worst pathological cases, such as keloids. To begin to patch the damage, a clot is created; the clot is the beginning process that results in a provisional matrix. In the process, the first layer is a provisional matrix and is not scar. Over time, the wounded body tissue then over-expresses collagen inside the provisional matrix to create a collagen matrix. This collagen over-expression continues and crosslinks the fibre arrangement inside the collagen matrix, making the collagen dense. This densely packed collagen, morphing into an inelastic whitish collagen[24] scar wall, blocks off cell communication and regeneration; as a result, the new tissue generated will have a different texture and quality than the surrounding unwounded tissue. This prolonged collagen-producing process results in a fortuna scar.

Fibroblasts

The scarring is created by fibroblast proliferation,[24] a process that begins with a reaction to the clot.[25] To mend the damage, fibroblasts slowly form the collagen scar. The fibroblast proliferation is circular[26] and cyclically, the fibroblast proliferation lays down thick, whitish collagen[24] inside the provisional and collagen matrix, resulting in the abundant production of packed collagen on the fibres[24][25][27] giving scars their uneven texture. Over time, the fibroblasts continue to crawl around the matrix, adjusting more fibres and, in the process, the scarring settles and becomes stiff.[28] This fibroblast proliferation also contracts the tissue.[26][29] In unwounded tissue, these fibres are not over-expressed with thick collagen and do not contract.
Myofibroblast

The fibroblast involved in scarring and contraction is the myofibroblast, which is a specialized contractile fibroblast. These cells express a-smooth muscle actin (a-SMA). The myofibroblasts are absent in the first trimester in the embryonic stage where damage heals scar free in small incisional or excision wounds less than 2 mm that also heal without scarring; and in adult unwounded tissues where the fibroblast in itself is arrested; however, the myofibroblast is found in massive numbers in adult wound healing which heals with a scar.

The myofibroblasts make up a high proportion of the fibroblasts proliferating in the postembryonic wound at the onset of healing. In the rat model, for instance, myofibroblasts can constitute up to 70% of the fibroblasts and is responsible for fibrosis on tissue. Generally, the myofibroblasts disappear from the wound within 30 days, but can stay around in pathological cases in hypertrophy, such as keloids. Myofibroblasts have plasticity and in mice can be transformed into fat cells, instead of scar tissue, via the regeneration of hair follicles.

Source: https://en.wikipedia.org/wiki/Scar

Statistics

Each year in the developed world 100 million patients acquire scars, some of which cause considerable problems, as a result of 55 million elective operations and 25 million operations after trauma. There are an estimated 11 million keloid scars and four million burn scars, 70% of which occur in children. Global figures are unknown but doubtless much higher. People with abnormal skin scarring may face physical, aesthetic, psychological, and social consequences that may be associated with substantial emotional and financial costs.

Source: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1125033/