

## What is new at Touching Well

Myofascial release (MFR) is the topic of many research papers at the moment, so much so that most of the studies summarised in this issue explore the therapeutic benefits of MFR.

The effects of MFR can go well beyond the “usual” outcomes of bodywork, such as helping with tension, pain and/or stress. It can help with asthma, reflux or breathing after heart surgery.

I am not surprised that MFR and massage can help with breathing. When we are relaxed (and have less pain) we breathe more easily – it is impossible to be anxious and breathe “properly”. Furthermore, the muscles that are involved with breathing: the diaphragm and the muscles between our ribs (intercostal muscles), can get tense and thus don’t work as effectively, so that releasing these muscles and their fascia improves breathing.

## What is fascia?

Fascia is the fibrous soft tissue component of connective tissue that is literally found everywhere in the body. Not all connective tissue is fascia, there is also cartilage, bone and blood, but all fascia is connective tissue. Fascia forms ligaments, tendons, the wrapping round the brain (meninges), nerves (epineurium), bones (pericosteum), muscle fibres (endomysium) and

bundles of fascia (myofasciae).

These used to be thought of as distinct anatomical

structures, but in fact all these tissues are connected like a giant spider’s web.

If we had a magic substance that would dissolve everything in our body except fascia, we would still be left with a complete three dimensional representation of a person. If you think of fascia as a tough silken body suits that permeates every structure of our body, you will not be surprised that (myo)fascial release can be very powerful indeed.

It is plausible that strain and tension in one part of the system can cause pain, lack of mobility or another dysfunction elsewhere. Fascia probably acts as a communication system transporting mechanical signals round the body, causing cells and tissues to act on the messages they convey. It is impossible to be touched without this having an influence on the fascial net. Touch can literally be transmitted down to the level of the cell though the fascia. (*Massage Fusion*, 2019, p85+86).



The image shows the holding of the head with gentle pressure. This usually sends you to a calm, resting place.

### In this issue

Myofascial Release (MFR)

#### On-Site Massage

Massage chair in a quiet room?

Foam rolling

#### Massage with a difference

MFR for breathing

MFR for reflux

MFR’s effect on the spine

#### Manual Lymph Drainage

MFR after breast cancer

MLD reduces pain

MFR after knee replacement

Wishing you a spring in your step,

*Regina Dengler*

### Recent feedback

*Regina is an amazing practitioner. Every treatment I've had has been unique and tailored to how I'm feeling and what my body needs in that moment. I can feel her wealth of experience and depth of skill, and that extends to her friendly welcome and heartfelt curiosity - bringing ease and openness from the moment I arrive. I speak as a massage practitioner myself - she is excellent.*

Paul Clarke, Southwell



## Massage chair in quiet room?

I have a confession to make: I love a good massage tool and I find the foam roller effective in dealing with my back issues – in the very short term (i.e. for the

next hour). I am also partial to a massage chair – that is an arm chair that massages you. When I see one and I have time, I normally put money in the slot and have a lie down. Obviously these are second or third best, having a massage by an

actual person will always be my first choice.

A study looked at the use of such a chair for nurses looking after patients at a cancer centre. They were interested how the massage by the chair would affect their stress level, blood pressure (BP) and heart rate (HR).

As we all know, permanent high levels of stress over a long time are not good for our health and well-being, it can also lead to burnout and cynicism.

Nurses had the opportunity to use a mechanical massage chair in a secure, quiet room for 20-minutes at the time. In total there were 200 such massage chair sessions during a six month period. Nurses self-recorded perceived stress using a visual analog scale, as well as BP and HR using a wrist cuff device before and after each session.

Perceived stress levels, BP and HR dropped significantly after a 20 minute session in a mechanical massage chair in a quiet room. (Clin J Oncol Nurs. 2019 Aug 1;23(4):375-381). This result does not surprise me. In a culture where many people work during their break and eat in a hurry, just having a break and a lie-down will have a positive effect. Perhaps easing their work-loads would be a better long term option than a mechanical massage chair.

## Foam rolling for office workers

Discomfort and back pain are not uncommon after sitting for a long time, in particular in front of a computer (extended periods on the sofa don't help

either). A study looked at foam rolling of the back as a way of easing stiff back muscles after a stint on the computer. Muscle stiffness of the back was measured in 59 office workers, who were sitting for four and a half hours at their desk. Half the people rolled their back with a foam roller for 8 minutes, the other half had a "controlled standing task". Surprise, surprise, the backs were significantly stiffer after sitting for four and a half hours. The workers who used the foam roller, the back was

slightly less stiff than before they started work. The backs of the people in the control group remained stiff. This study shows the benefit of even a short session with the foam roller after sedentary work.

(Appl Ergon. 2019 Sep 9;82:102947). On-site massage also loosens the muscles of the back, neck and shoulders, and thus can also prevent the consequences of sitting for long periods of time.

### Feedback from a publishing company – a one-off session

*I found the chair massage extremely relaxing. I felt at ease from the beginning.* Megan

*I really enjoyed the massage. I feel great afterwards. The pressure was perfect – great experience.* Lauren

*Really relaxing, long overdue for my back.* Cam

*Different to any massage I had before. I thoroughly enjoyed it and I am definitely feeling the benefits.* Stephanie

*I really enjoyed it. Really felt a huge difference straight away. Thank you so much.* Emily

*Very different from other massages. Really enjoyed it.* Sophie

*Really relaxing. So much needed for my stiff shoulders. Thank you.* Philippa

### Feedback from the staff at Mansfield Building Society

*As always, a great way to start the day.* Liz

*I find the massages very beneficial and they are definitely helping me. I look forward to the next one.* Jill

*The massages are very important and make a huge difference to my physical state. I feel very relaxed and relieved upon every visit. They are an important part of my overall well-being.* Carol

*I was so stiff and you have loosened my shoulders.* Karen

*Another excellent session with lots of knots worked on.*

*Feels much easier.* Lovely. Mike

*You have made my back feel much better.* Mel

*A great massage. Thank you. They really help. An opportunity to relax.* Vickie

## Breathing better?

In one study a group of sedentary women received myofascial release of the diaphragm, and similar group received “sham technique” of diaphragm release. They measured the circumference of the chest wall during breathing before and after the treatment for each woman. They found that there was more movement for those women who had their diaphragm released, then those who had the pretend treatment. Also, the muscles of the back of the body (the posterior chain) were more flexible. (*J Bodyw Mov Ther.* 2018 Oct;22(4):924-929).

Another study looked at patients after a coronary bypass surgery. All 80 patients had “normal rehabilitation”, but half of them also had a session of myofascial release the day before, and on day 3 and 6 after the procedure. All patients were assessed with regard to pain, breathing difficulties and endurance (after physical exercise) before the surgery, and on day 4 and 6 post-operatively. Not surprisingly, all patients in the study improved after surgery and as time went by, but the people who received the three sessions of myofascial release improved more. MFR helped with pain relief and breathing, as well as physical fitness and fatigue. (*Disabil Rehabil.* 2019 May 3:1-12).

## MFR for reflux

This study looked at whether MFR of the diaphragm can positively influence the symptoms for non-erosive gastroesophageal reflux disease – GERD – anything for a good acronym, it is also known as reflux. They wanted to know if MFR had any effect on the symptoms, quality of life and use of medication (proton pump inhibitors (PPI)). They used the Reflux Disease Questionnaire and the Gastrointestinal Quality of Life Index at baseline, one week and four weeks after the treatment. The need for PPIs was measured over seven days before each assessment. 30 patients with GERD were randomized into a MFR group or a sham group.

At week four, patients receiving MFR showed significant improvements in their symptoms and quality of life. They also used less medication compared to the sham group. (*Sci Rep.* 2019 May 13;9(1):7273).

From the abstract I take it that patients received one session of MFR to the diaphragm. It truly amazes me that this session has an impact even four weeks after

treatment. Only 15 people were in each group, so the effect must have been large in order to be significant. Bad news for the manufactures of PPIs. My understanding is that proton pump inhibitors might not be as innocent as they were first thought to be, for example they carry an increased risk of pneumonia.

(*Harvard Health Letter,* 2009, Jan).

## MFR’s effect on the thoracic spine

Myofascial release (MFR) plays a role in the treatment of lower back pain, ankle injuries, fibromyalgia, and headaches. Even though MFR is a widely used manual therapy, there is little consensus on whether it leads to biomechanical, systemic or interoceptive changes.

This study looks at the immediate biomechanical (increased elasticity will also increase range of motion), systemic (local versus distal areas of pain threshold) and bodily awareness effects (interoception) of myofascial release on the thoracic spine.

Twelve healthy participants had three treatments: a control, a sham, and the MFR treatment, the order of treatment was randomly allocated.. The study assessed biomechanical, systemic, and interoceptive effects using range of motion (ROM), pressure pain thresholds (PPT)\* local and further away (distal), and interoceptive sensitivity (IS) respectively.

There were significant increases in ROM and PPT (both local and distal) post MFR intervention. Interoceptive sensitivity did increase post-MFR but this was non-significant.

The increase in range of motion suggests that MFR had caused biomechanical change in tissue elasticity allowing more flexibility. As the pressure pain threshold increased (that is more pressure can be applied before it is experienced as pain) both near the thoracic spine and further away indicates that the effect of MFR is not only local but all over the body. (*J Bodyw Mov Ther.* 2019 Jan;23(1):74-81). I can personally vouch for that, both from own experience receiving treatment and as a therapist. I have felt fascial work on my face in my feet, and I have noticed release in clients far way from the area I was working on.

\* remember the algometer from previous newsletters?

### **MFR after knee replacement**

This study explored whether MFR could help after a total knee replacement. 33 people post-knee replacement were assessed before and after MFR treatment of the thigh. They measured ROM of the knee, pain and electric activity of the biceps femoris muscle (one of 3 hamstrings).

The electric activity of the biceps femoris muscle was increased, and so was the ROM of the knee. Eight out of 33 participants had reduced pain after MFR. MFR increased muscle activity, reduced pain and improved the range of motion of the knee. (*J Bodyw Mov Ther.* 2018 Oct;22(4):930-936).

### **MFR after breast cancer surgery**

After breast cancer surgery and radio therapy women are left with scars, which can lead to fibrosis or shrinking of the connective tissue. Myofascial release can help to ease these restrictions of the fascia.

A study looks at the impact of myofascial release on survivors of breast cancer. Twenty four women participated, 13 had MFR, and 11 received MLD (manual lymphatic drainage) as a control treatment for 4 weeks. The researchers looked at pain, shoulder range of motion (ROM), functionality, quality of life (QoL), and depression, immediately after treatment and one month later.

Women who received MFR fared better in terms of physical symptoms: they had less pain and the ROM of the shoulder improved (except for internal rotation). Both MLD and MFR helped with function. In terms of quality of life (assessed with FACT-B), the therapies appear to improve different aspects. MFR helped with the physical aspect of QoL, while MLD appeared to address the emotional dimension and the “breast cancer subscale”.

In conclusion, an MR-based treatment shows physical benefits (i.e., overall shoulder movement, functionality, and perceived pain) in women after breast cancer surgery. (*Support Care Cancer.* 2019 Jul;27(7):2633-2641). I don't see these treatments as mutually exclusive, I have clients where we decide at the beginning of the session the desired treatment outcome: MLD, MFR or both. If someone comes for preventative MLD after breast cancer treatment, I usually suggest MFR to address the physical

consequences of the treatment.

### **MLD reduces pain?**

The purpose of this study was to look at the acute effects of manual lymphatic drainage (MLD) on pain threshold and pain tolerance of different body parts. They studied thirty healthy volunteers (10 women and 20 men). Pain threshold and pain tolerance of the arms and legs were evaluated with an algometer before and after MLD. The pain threshold increased significantly, so did the pain tolerance on the legs.

The results of this study, that MLD increased pain threshold and tolerance, has important implications. Firstly, MLD could be used for pain control generally, but also help people with lymphoedema to tolerate discomfort with compression or exercise. (*Lymphat Res Biol.* 2019 Jul 19).



In this image I use **MLD with Deep Oscillation** to bypass the damaged lymph nodes in the axilla to drain the oedema in the right arm.

PS: Isn't it interesting that we think that

### **Death is for other people.**

A study found that the brain shields us from existential fear by categorising death as an unfortunate event that only befalls other people. Researchers say that our brains do their best to keep us from dwelling on our inevitable demise, our brain does not accept that death is related to us. We have a primal mechanism that means when the brain gets information that links self to death, something tells us it's not reliable, so we shouldn't believe it. (*Guardian* 19<sup>th</sup> October 2019)