

INTERNATIONAL MASSAGE ACADEMY OF SWITZERLAND





MAREY EL HAMOULY massage masterclass

Welcome to

DEEP TISSUE MASSAGE 3-D

Method Marey El Hamouly

Advanced Level

Masterclass

"HAPPY PAIN"

Practitioner's Training Manual By Marey El Hamouly



"I advise you to read this training manual before you start practical session"

CONTENTS

Introduction of the Masterclass

1-Course Details

2-Philosophy of Marey El Hamouly

3-Introduction Deep Tissue Massage 3-D

4-History of Deep Tissue Massage

5-Review of Deep Tissue Massage

6-Assessment Techniques

7-Soft Tissue Dysfunction

8-Introduction of Trigger Points/ Muscle Knots

9-Principles of Deep Tissue Massage 3-D

10-Body Mobilisation Techniques

11-What are the benefits of mobilisations?

12-Common body parts treated by mobilisations

13-What is deep tissue mobilisation?

14-Selected treatment techniques by

-Latissimus Dorsi -Lumbar strain -Quadratus Lumborum (QL) -Lumbar Erectors -Psoas / Iliacus -Thoracic



-Glutes / Piriformis / Hip Rotators
-Infraspinatus muscle release and scapula rotation and Mobilization
-Superior and inferior/ posterior and Anterior leg muscles

15-Health and Safety at Work

16-Medical Disclaimer

17-Contra-Indications, Contra-Actions and Aftercare

18-Contact Details





L.M.T/ M.M.T/A.E.T Marey El Hamouly President International Massage Academy of Switzerland IMAS

"Health is not everything, but everything is nothing without health"

Once you would like to elevate and develop your Massage skills,

This 100% Masterclass of techniques and is made to take you to the next level of skills which you can really help and treat your clients.

A professional and personalised online learning solution for leading Massage Therapists to next level.

am cordially inviting you to discover the world of Deep Tissue Massage-3D, using your body weight correctly and pressure points release as one of the best treatments for Trigger Points Release, Muscles pains and increase ROM.

As a mechanical Massage and manual therapy to let your clients Enjoy the highest level of personalized world-known services and total wellness...



Philosophy of Marey El Hamouly about the Massage Career

I am a manual massage therapist since 1992 and for the last 30 years, I am happy and grateful about how much I actually know about getting people out of pain, my clients were noticing my quality of touch and direction of my treatments, and I am happy to share my Knowledge, experience and passion with you.

Thank you so much every one for helping me become the type of therapist into the massage & bodywork career.

If you want a career in a real massage and are searching for a great massage Masterclasses, look no further, you will find what you are looking for at <u>www.mareyelhamouly.com</u> Massage Masterclasses.

My team and I more than willing to provide the best Masterclasses presentation from anywhere at any time.

Why are these Online-Masterclasses different?

We provide Online-Masterclasses in the benefits of massage and massage therapy techniques, but we also provide in-depth techniques in soft-tissue pain.

The Online-Masterclasses focuses on muscles that are "locked" short from chronic, excess muscle and nerve tension and muscular imbalances that are connected to musculoskeletal pain, restrictions of body movements, and poor posture.

I am completely satisfied with my choice in Massage career.

I sincerely hope that together we may continue to enlighten the world about the value of massage therapy in our health care system today and into the future.

Respectfully,

marey el Hamouly



COURSE DETAILS

Description

Wouldn't you just love to know how to do this incredible form of deep tissue massage?

Well you can from best-selling massage course instructor,

Marey El Hamouly!

Marey has done deep tissue massage for elite athletes, celebrities and even Presidents of Countries and is going to teach you exactly the same massage sequences that he did on them.

Marey is an International Approved Continuing Education Provider for Therapeutic Massage and Bodywork.

In this massage Masterclass, Marey El Hamouly guides you step by step to show you massage techniques on how to give your massage clients an incredible treatment and massage experience.

Once you learn this Massage techniques, you can use it and also will be able to incorporate these massage techniques into any of your other massages such as your relaxation or sports massage sequences.

Marey shows you not only what his more than 30 years of experience has helped him, but also he shows you the ways to avoid the mistakes that he has made along the way.

This online massage Masterclasses will give you the skills set to give your clients an amazing massage experience.



Once you have successfully completed this Masterclass, and you answer the questions (test chapter)

you will receive your Certificate in

DEEP TISSUE MASSAGE 3-D

Method Marey El Hamouly

Advanced Level

From Marey El Hamouly as an Awarded International Lecturer

Approved by

World Massage Council-WMC &

International Massage Academy of Switzerland -IMAS

Good luck and enjoy!



INTRODUCTION of DEEP TISSUE MASSAGE 3-D Method Marey El Hamouly

If a muscle has been injured or is holding tension, due to poor posture, stress or illness, then adhesions can form.

Adhesions are bands of painful, rigid tissue which can form in muscles, the tendons or ligaments and can lead to poor blood flow to the area as well as limitation of movement, leading to pain.

The purpose of a deep tissue massage is to release the muscle fibres that have become "stuck", in order to remove toxins and to encourage blood to circulate again.

It is important to note that clients should be referred to another professional such as an Osteopath, a Physiotherapist or Sports Massage therapists if you suspect that there is an injury that warrants expert advice.

Therapeutic touch has been used in human beings to soothe aches and pains.

Most dogs also seem to enjoy being touched.

Manual deep tissue mobilization is a physical therapy technique that is used to release tightness in muscles, fascia, ligaments and other soft tissue.



History of DEEP TISSUE MASSAGE

Ancient Greeks and Egyptians were the first to discover the healing power of massage. By the late 1800s, the concept was adopted in Canada and in the United States.

Towards the end of the 1800s. Although no one can say for certain at the moment, it is possible that it was one of many experiences that were brought to the western world, along with other traditions during the times of colonialism.

Deep tissue massage was used for decades throughout both countries, but solid guidelines and procedures weren't established until the mid 1900s.

Whether the specifics were adapted after being brought to the west or were a new idea altogether, it is impossible to prove.

The origin of the deep tissue massage does however have some very firm routes in Canada. With everything documented and introduced to the rest of the world in an orderly, detailed, and insightful fashion by Dr. Phrimmer.





A Canadian doctor, Therese Phrimmer, is credited with establishing **Pfrimmer Deep Muscle Therapy**

Her book, Muscles-Your Invisible Bonds, became the cornerstone of the treatment and served as a how-to manual for many of the first massage therapists.

Phrimmer says she used a daily regimen of deep tissue massages to cure paralysis in her legs. Her personal experience and detailed book gave her the momentum needed to open her own clinic in 1949.

Phrimmer encouraged slow, long strokes to work stress out of the body.

Gentle but firm pressure is applied to problems areas or knotted muscles.

This kind of massage is designed to reach deeper than a Swedish massage.

A massage therapist may use their thumbs, fists or elbows to apply pressure and unlock tension trapped deep beneath the skin's surface.

While firm pressure is applied, a deep tissue massage should never hurt.

Review of

Deep Tissue Massage

What is a deep tissue massage?

A deep tissue massage is not just a firm massage where you apply more pressure as the Swedish Massage form, but instead consists of different techniques that are used to allow the therapist to work beyond the superficial muscles, usually in a specific area, use firm pressure and slow stroked to massage deep layers of muscle and fascia, which is the connective tissue that surrounds your muscles, to reach the deep tissue of muscles which stuck with the bones, ligaments and around the articulations.

Why choose a deep tissue massage?

With so many massage and relaxation techniques available why would you choose a deep tissue massage over a Swedish or Thai one?

Intended for musculoskeletal issues, the deep tissue massage is ideal for sprains, strains, sports injuries, and healing.

It is a well-known drug-free way to relax and repair.

An evidence base is consistently growing, showing that the benefits of deep tissue therapy significantly reduce the reparation time of individual injuries and provide adequate pain management for longer-term conditions like multiple sclerosis.



Benefits of a deep tissue massage

As deep tissue massages become more popular and research, feedback and longer-term achievements are understood, the list of benefits continues to expand.

It is an excellent way to reduce tension from contracted muscles such as the neck and shoulders.

It has even been reported to ease the symptoms of whiplash, back pain, and sciatica.

Allowing you respite from the uncomfortable pain and therefore improving your quality of life.

More recently, deep tissue massages have been found to reduce the symptoms of fibromyalgia as it is believed to relax the central nervous system.

This form of therapy also affects the hormones that are essential for pain blocking and mood evaluation.

After one of these massages, you will be buzzing with endorphins, serotonin, and norepinephrine.

These hormones also help to manage symptoms from stress, depression, and anxiety so your mental health will have an extra boost.

If this deep tissue therapy was not already sounding like it is overflowing with benefits there are still so many more.

Have you heard of a policeman's heel? Otherwise known as Plantar Fasciitis, this condition is a strain of the ligament on the bottom of your foot, between the arch and the heel.



Between the ages of 40 and 60, this muscle strain becomes more common and many people are having to rest, take antiinflammatories, and use heat and ice for weeks on end.

That ache when you first place your foot on the ground in the morning, that continues to come and go throughout the day has an alternative treatment though, deep tissue massage.

If that was not enough this massage increases respiratory function for chronic lung diseases like asthma, promotes faster healing of muscles through the increased blood flow, reduces blood pressure, and helps with other musculoskeletal issues like mobility and posture. The benefits just do not seem to end.

Potential Benefits

Deep tissue massage usually focuses on a specific problem, such as chronic muscle pain, injury rehabilitation, and the following conditions:

- Low back pain
- Limited mobility
- Recovery from injuries (e.g. whiplash, falls)
- Repetitive strain injury, such as <u>carpal tunnel syndrome</u>
- Postural problems
- Muscle tension in the hamstrings, glutes, IT band, legs, quadriceps, rhomboids, upper back
- Osteoarthritis pain
- Sciatica
- Piriformis syndrome
- Tennis elbow
- Fibromyalgia
- Upper back or neck pain

Not all of these benefits have been scientifically proven.



But if you are interested in a massage to prevent sports injury, address sport-specific concerns, or to help with muscle recovery after sports, consider getting a sports massage.

Deep tissue massage techniques are used to break up scar tissue and physically break down muscle "knots" or adhesions (bands of painful, rigid tissue) that can disrupt circulation and cause pain, limited range of motion, and inflammation.

What happens during a deep tissue massage?

Advices for patients

If you have understood that the benefits are enormous, you may be wondering what will happen when you arrive.

As with anything new, nerves are to be expected so we have tried to give you as much detail as possible to put your mind at ease.

Step 1

When you arrive, the first thing you will do is have a chat about what you are hoping to get from the massage.

Which deep tissues you are experiencing difficulties with and what your therapist can do to help.

Although you can ask questions at any point, this is the best time to get the ins and outs of whatever worries you so that once the deep tissue massage begins, you can relax and let the massage revive you.

Which part of the body will be massaged will depend on your problem areas. Some people request a full-body deep tissue



therapy session to aid their overall relaxation and to release any small knots and adhesions.

Other people, who are having pains and aches in particular areas, only wish for that site to be concentrated on.

If you are only having pain in your leg, there is not much point to us spending half an hour reaching the deep tissues of your arm and vice versa.

Although a full-body deep tissue massage would be a great way to prevent a build-up of metabolic toxins and small issues before they become debilitating, it is probably not what you came for.

Knowing what you are struggling with allows the therapist to dedicate their time to the area that is going to help you to get back on with your day comfortably and as pain-free as possible.

Step 2

You will be shown to a private room where you will be able to undress alone. You must keep your underwear on, although you will be given a towel to place over yourself. The only part of your body that needs to be available to the practitioner is the area that needs to be worked on.

Therefore, if the practitioner is working on your policeman's heel, you will probably want to keep your top on.

Step 3

When the deep tissue massage begins, a light touch will be used until your muscles are warm. Once this has been achieved the kneading and stroking will begin with varying levels of pressure.



Step 4

The deep tissue massage has finished and although you are feeling so good that you never want it to stop, it is time for the practitioner to leave the room and let you get dressed with privacy.

The therapist will be waiting just outside as soon as you are ready.

At this point, you could book a routine full body massage to catch those naughty muscles before they cause discomfort again.

Does a deep tissue massage hurt?

Some people are nervous about whether deep tissue massages hurt and therefore we have dedicated a section to answer that question specifically.

With any massage, including deep tissue ones there can be some discomfort at times.

This is often because the muscle is tight already and tender, at times there may be a slight pain however that should be brief.

If you continue to feel pain or you feel that the pain was more than you were expecting then please tell the therapist straight away.

Although a little bit of discomfort is to be expected, pain can have the opposite effect to what you are aiming for.

Pain itself can cause a muscle and the surrounding areas to tighten and tie themselves up in knots. If the muscles tighten then the practitioner will be unable to reach the inner depths.



Often all that is needed is to return to the slow movements to warm up the muscles a bit more or to adjust the way that the muscles is worked.

Remember you can tell your therapist to stop at any time!

Deep tissue massage side effects

Even though the benefits of a deep tissue massage are relaxation, reparation, and reduced pain there is the possibility that you will be sore after the therapy.

This can last for a day or two but as soon as that eases the full benefits of the massage will be experienced.

Are deep tissue massages safe?

Deep tissue massages are known to be very safe and beneficial for a multitude of ailments.

As we discussed earlier this therapy can improve symptoms of serious muscle conditions such as fibromyalgia.

It can also help with multiple sclerosis, ALS, and Parkinson's too.

There are circumstances when deep tissue massages would not be advised without agreement from your general practitioner.

If you suffer from a blood clotting disorder you must speak to your GP as there is the possibility that the massage will release one of your clots.

If you are taking blood thinners or have a bleeding disorder then this should also be checked with your GP.



Although people who have been diagnosed with cancer will feel the benefits of a deep tissue massage it is essential that you speak to your usual doctor first, there may be another massage therapy that would be more suited to your condition.

It is not recommended that Osteoporosis sufferers receive a deep tissue massage as if the bones are weak then the pressure could cause a small fracture.

As your therapist will be thoroughly trained in, and practice such a variety of massage therapy techniques, they will have an alternative that may be more suited to your needs.

Deep Tissue Massage VS Swedish Massage

What is the difference?

Swedish Massage uses long strokes and light to achieve kind of pressure to provide gentle relaxation.

Deep Tissue Massage is a more technique that focuses on release tension deeper layers of muscles and connective tissue.

The **deeper** pressure is beneficial in releasing chronic **muscle** tension. The focus is on the deepest layers of **muscle tissue**, tendons and fascia (the protective layer surrounding muscles, bones and joints).

It is especially helpful for chronic aches and pains and contracted areas such as stiff neck and **upper** back, **low back pain**, leg muscle tightness, and sore shoulders.

Deep tissue has become an overused term in the massage world, and it usually used incorrectly.



ASSESSMENT TECHNIQUES

The assessment process will take a variety of procedures.

Firstly there will be a **verbal discussion**, completing a consultation form to determine the clients' lifestyle, medical history and also the presenting problem/s.

It is essential, that during this process, you find out as much information as possible on what seems to make any muscular pain worse and if you feel that the client needs medical advice due to the presence of an injury, then to refer them appropriately and do not treat.

As part of your consultation process, below are other ways to carry out an assessment.

Observation

one of the best ways to observe the client is naturally, because if you tell someone you are watching them they will unconsciously change their actions.

Watch them as they walk across the room, as they sit down, or reach for their bag.

Do they have an unusual way of walking, do they appear to have one shoulder higher than the other etc.

Ideally, ask your client to be dressed in undergarments (shorts/vest), and stand behind them approximately a metre away.

Imagine they have a plumb line running through the body from head to the feet.

The line should run through the ear, through the shoulder, through the hip and knee and be in front of the ankle.

-Start by looking at the head to see if it is level, use the ears as a guide.

-Do the shoulders sit straight?

-Check the "key hole" (the gap between the arms and the body) to see if the gap is wider on one side.

-Do the hands hang at the same length?

-Look at the belt line of the clients' underwear to see if level, this may indicate scoliosis otherwise.

-Look at the back of the knees to see if the skin creases are level.

-Do the knees turn in or out?

-Check for the alignment of the Achilles tendons to see if there is any thickening of either tendon.

-Look at the angle of the feet to see if they are turned in or out.





Range of Motion (ROM)

Another way to carry out an assessment is to determine the amount of movement which occurs without discomfort or pain.

If you are going to carry this out, demonstrate the movement to your client beforehand and always carry out checks on the unaffected side first, so that you have something to compare it to, then check for restriction or pain.

This is purely as a guide and should not be used as a diagnosis, but can help you understand that muscles may be tight or restricted in a particular area





Palpation

this is the process of feeling with your hands, sometimes before but definitely during the massage and it is a continual process throughout the treatment.

Palpation will give you feedback on areas where you need to concentrate on and with lots of experience your fingers will begin to "see" what is beneath.

During palpation, your fingers move the skin over the underlying tissues so that you are able to determine different textures. This procedure needs to be carried out very slowly.

Below are some of the textures you may feel:

- Soft and pliable: this indicates healthy and relaxed soft tissue.

- Firm and stringy: will usually be tendons, due to their fibrous nature.

- Firm and less resilient: this can indicate thickening of the fascia.

- Dip in the contour of the muscle: this can represent a tear in the muscle.

- Woody and stringy and may "flick": can signify adhesions of the fascia.

- Firm, gritty and fairly pliable: can indicate recently formed scar tissue. Firm, solid, can signify mature scar tissue.

- Knotty and resistant: this can indicate tension within a muscle.

- Fluid: if there is oedema in the soft tissues, the sensation can be soft and mobile, however if there is excessive fluid then the skin can feel tight, firm and be painful.



What applicator should I use for palpation?

- Flat palpation:

use the fingertips to slide around the patient's skin across muscle fibres.

- Pincer palpation:

pinch the belly of the muscle between the thumb and the other fingers, rolling muscle fibres back and forth.

- Flat hand palpation: useful in the abdominal region (viscera).

- Elbow: allows stronger leverage which can be an advantage.

- Finger pads palpation: I prefer to use the 2 Middle fingers to palpate the TPs, remember to cut your finger nails (shorter is better)



(PS: check <u>www.mareyelhamouly.com</u>) Massage Masterclasses Trigger Points Protocols & Muscle Stretches Release Masterclass







Soft Tissue

Dysfunction

- Adhesions are fibrous bands that form around joints or within the fascia layers.

They are formed from elastic fibres and are usually caused by inflammation or injury and the release of adhesive glycoprotein's which aid the repair process.

You may know adhesions as "knots" "Trigger Points"

Introduction of:

Muscle knots



What are muscle knots?

Muscles knots are hard, sensitive areas of muscles that tighten and contract even when the muscle is at rest.

These tense muscle fibers can cause pain in other parts of the body when touched. They're also known as trigger points.

Muscle knots are small, bump-like areas of **muscle** that can be painful to the touch. The medical term for **muscle knots** is myofascial trigger points, these **knots** occur when **muscle** fibers or the bands of tissue called fascia underneath them tense and tighten.

Doctors classify trigger points as either active or latent.



Muscle knots can be caused by:

- -a sedentary lifestyle
- -overusing or injuring your muscles

-poor posture

-Dehydration, unhealthy eating habits, and stress and anxiety may also contribute to muscle knots.

-Muscle knots can occur anywhere in the body, but they're usually found in your back, shoulders, and neck, they often show up in your gluteal muscles too.





Muscle knots can cause symptoms

Muscles knots can cause aching sensations and pain in your muscles and joints, when you touch a muscle knot, it may feel swollen, tense, or bumpy.

It could also feel tight and contracted, even when you're trying to relax, and they're often sensitive to the touch. The affected area may even become inflamed or swollen.

And, Muscle knots can cause **symptoms** in areas outside of the muscles, including:

-Headaches

-Toothaches

-Earaches

You may also experience stress, anxiety, and depression, and have difficulty sleeping.

Treatment

Treating muscle knots can take time. To get rid of the knots, you'll need to break up the knotted tissue and calm inflamed nerves. Following are some things you can do to help break up the knots and find relief.one of the best treatment of Trigger Points

-Rest

-Stretch

- -Hot and cold therapy
- -Use a muscle rub
- -Trigger point pressure release
- -Physical therapy
- -Massage therapy
- -Self-massage
- -Swedish massage
- -Deep tissue Massage

For more education about these Massage treatments: PS: check <u>www.mareyelhamouly.com</u> . Marey El Hamouly Massage Masterclasses



Deep tissue massage

This type of massage uses forceful strokes to release chronic muscle tension, it targets the deeper layers of muscle and connective tissue, it's often used to treat muscle damage from injuries.

Sports massage therapy, this massage technique is geared especially toward athletes, it can be used to prevent or treat injuries.

When to seek help

Untreated muscle knots can cause chronic pain and lead to other health issues.

Patient has to See his/her health care provider if he/she has taken measures to relieve his/her muscle pain, but it persists.

He/she should also call his/her doctor if pain becomes severe and is interfering with his/her daily life and wellbeing.

It's possible that what seems like a muscle knot could be something else, such as a swollen lymph node.

For more education about Trigger Points Release

PS: check <u>www.mareyelhamouly.com</u> . Marey El Hamouly Massage Masterclasses Trigger Points Protocols & Muscle Stretches Release Masterclass

- **Scar Tissue** is the body's natural response to injury, and its aim is to bring two ends together, for example in a torn muscle.

It is also made of elastic fibres but also collagen and can be sticky in its early stages, causing the fibres to adhere together, causing muscle fibres to clump together over time and preventing the fibres from gliding.

Scar tissue can become as hard as bone, and non-pliable reducing the Range of Motion in a joint.

Generally, the earlier scar tissue is managed, the less damage it will cause.



- **Fibrosis occurs** when excess fibrous connective tissue forms usually due to tissue damage such as repetitive strain.

- **Muscle spasms** are a convulsive muscular contraction which can be a result of tissue damage as the natural response is to contract nearby muscles.

They can also occur if a muscle is overworked or over stretched.

The contraction of the muscle fibres can compress on blood vessels and with a build up of toxins in the muscle, the nerves can become irritated, causing pain.

Principles of Deep Tissue Massage Mobilisation

Principle 1:

Be relaxed, Work deeper, and Never strong

Deep work and strong, these are two different things, and if your hands are shaking from trying to work too hard, work less intense, slower, or switch to another "tool" such as your elbow or forearm.

Principle 2:

Warm up tissues before deeper work using a little oil

A massage typically begins with fairly superficial, general strokes. The pressure should be firm but fairly light to start with.

As the tissues become "warmed up" the therapist should start to apply more pressure, and work into specific areas of tension.

Warming up the tissues prepares the client for deeper work, and it also brings circulation to any problem areas.

If a therapist does not adequately warm up the tissues before proceeding to deeper work, the client will be unable to tolerate as much pressure.



In addition the work which they do will be less effective due to the restricted circulation that is commonly associated with musculo-skeletal complaints.

An oil or lotion is, of course, necessary to prevent rubbing of the skin; however, most students use much more than is necessary.

When you work deeply, it is important to your health that you do not strain yourself.

Too much oil dissipates your energy at the skin layer and not at the depth you are trying to work at, requiring you to waste your energy.

Lotions are usually less slippery than oils and allow you to grip the tissue more easily without too much pressure.

Principle 3:

Work within your <u>client's pain tolerance</u>

Many people seem to come to the massage table with the attitude that the more painful their massage is the more effective it will be.

This belief is often based on their experiences with Physiotherapists or massage therapists with little training.

The fact is that muscles respond to pain by tensing.

If you are working hard enough to make your client tense up, then your energy will be wasted on fighting against them.

Another reason that this doesn't make sense is that we are typically trying with our massage to relax and lengthen shortened, contracted tissues.

Clients with this belief need to be educated.

To ensure that you are working within your client's pain tolerance it's important to regularly seek feedback.

Monitoring the following can provide you with the information needed to keep your pressure at an appropriate level.

- Verbal & non-verbal feedback
- Breathing pattern
- Muscle tension

Please note that the use of verbal feedback in itself is not enough.

Just because your client tells you that the pressure is OK, doesn't mean that it is.

If you're using too much pressure, their body will tense. They will often hold their breath.

Pain scales are very useful when applying deep tissue massage techniques, typically a pain scale of 1-5 or 1-10 is used.

If you are going to use a pain scale, it's important that you explain the reasons for using the pain scale, and what the levels of the pain

scale mean.

It's especially important that you make it clear which point on the pain scale relates to the point where they no longer find the pressure comfortable, and are starting to tense. For example

"I like to use a pain scale with my clients, it's important that the pressure I use stays comfortable to you, some minor pain can be useful, but not if it's making you tense up.

" <u>I want your muscles to relax and lengthen</u>."



Principle 4:

Flush tissues after deeper work

After some deeper work, a massage therapist should always spend some time applying some lighter, more general strokes through the area that has been worked.

This acts to flush the area of any metabolic wastes that will have been released in the course of the deeper massage, and also to calm the nervous system.

The flushing effects of massage Calming the nervous system is important because pain has a stimulating effect on the nervous system.

Principle 5:

<u>Slow, rhythmical</u>, comfortable massage leads to relaxation and lengthening

You know from your experience of providing relaxation massage that slower, rhythmical massage tends to be more relaxing than faster arrhythmical massage. These same principles apply to deeper work.

Slow deep longitudinal (in the direction of muscle fibres) stretching stimulates nervous-system receptors and leads to reflexive relaxation of the muscle.

Principle 6:

Work slowly

The deeper you work, or the more resistant the muscle is to relaxation, the slower you should work.

When people associate pain with deep work, it's usually because the speed of the work doesn't match the depth or force of the pressure.



Principle 7:

Use indirect pressure

Never press directly on a bone.

The masseur rarely needs to work at an angle greater than 45 degrees.

Nerves and blood vessels have the ability to stretch or move from side to side, but can be damaged if pressed against bone.

This is especially important in the gluteal region, where the sciatic nerve can be easily pressed against the pelvis.

Principle 8:

Work the tendon muscles in addition to working the belly muscles

Often tense due to overload a shortened and inflexible muscle is manifested in the attachment of the tendon to the bone.

Softening the tendon and stimulating the stretch receptors is important for muscle relaxation. This is especially important for long muscles such as the hamstrings.

Attachment work can relax the muscles so much that it takes less time to thoroughly work on the belly of the muscle.

Principle 9:

Use Techniques adapting to each <u>client needs</u> and have a clear understanding of what you want to achieve of depth work

Assess each client visually, by palpation and by interviewing them to identify areas where there is tension.

Too many massage therapists simply start working the same way with all clients and do the massage "mechanically".

Your goals should dictate your technique.

These parts well explained in the Body Mechanics part.10,11,12,13

Principle 10:

Use proper body mechanics

Most of the therapists' injuries are due to the stress of their work.

This may be due to too high a pace of work or due to incorrect body mechanics.

The energy for your work should not come from the contraction of your own muscles.

Either use gravity and your own weight from above, or the force from your feet as you push off the ground.

Principle 11:

Don't use your thumbs for deep work.

The thumbs are too important a tool in general massage to be overburdened or injured by deep work. 90% percent of the deep work normally done with the thumbs can be done with the knuckles, fists, or even elbows. Practice with these tools and they'll be as responsive,

comfortable, and efficient as your thumbs.

Principle 12:

Correct working distance from the client

The correct working distance from your client is also important for conveying a feeling that is both relaxed and powerful.



Strength must come from two main sources:

Gravity allows the weight of the therapist to be directed from above the client.

The feet and legs must provide power from the ground.

Most of the therapist's joints should be extended, but not locked.

If you are working too close to a client with crooked arms, the strength must come from the outside muscles, not the energy from the inside.

However, if you work too far away, you won't be able to use your own weight and gravity due to your distance.

Ideal Working Distance In this example,

the therapist is at a sufficient distance so that the wrists, elbows, shoulders, and back are extended so that no energy is lost in the flexed joints when pushing off with the legs.

The therapist is also close enough that he can use his own weight to apply pressure from above.

Working too close Here we see that the therapist is too close to his client.

Note the bent right wrist, bent elbows, clenched shoulders, and a forward bend in the lower back.

If the therapist wanted to use gravity more effectively, he could get up on a table so that his arms were extended or he could use another tool such as the forearm.


Principle 13:

Let the body react and stabilize before moving on.

Pronounced changes in the form of a deep breath, sweating, relaxation of a chronically shortened muscle and changes in skin color are signs of activation of the autonomic nervous system.

If you notice these changes, it is often a good idea to stop actively working and even break contact with the client for a little while to allow the relaxation.

In most cases, bring the muscles into a stretched position to achieve release, or you can work in different area in alternative way Conclusions

Little oil, Not Fast, DEEP Pressure, NO SKIN POLISH, Happy Pain, 45 /90 Angles, starting position with light pressure, use Body Weight power, Body Weight Transference, NO MUSCULES EFFORT, relaxed and soft hands, shoulders down...etc



Benefits of a deep tissue massage 3-D

The primary techniques included in Deep Tissue Massage-3D manual therapy are mobilization and manipulation of joints and associated soft tissues.



Mobilizations are passive movements that are oscillatory or sustained stretch performed in such a manner that the patient can prevent the motion if so desired.

These motions are performed anywhere within the available ROM.

Deep Tissue Massage-3D techniques are skilled hand movements intended to:

-improve tissue extensibility.

-increase range of motion (ROM).

-induce relaxation.

-mobilize or manipulate soft tissue and joints.

-modulate pain.

-reduce soft tissue swelling, inflammation, or restriction.

The intent of this article is to provide an overview of the principles of Deep Tissue Massage and Manual Therapy Mobilisation-3D.

Followed by selected treatment techniques for:

-Lumbar area strain

-Quadratus Lumborum (QL)

-Lumbar Erectors, Psoas / Iliacus

-Thoracic

-Glutes / Piriformis / Hip Rotators

-Infraspinatus muscle release and scapula rotation and Mobilisation

-Superior and inferior/ posterior and Anterior leg muscles

MOTION IS LOTION

M

DEEP TISSUE MASSAGE MOBILISATION 3-D

TECHNIQUES

If a muscle has been injured or is holding tension, due to poor posture, stress or illness, then adhesions can form.

Adhesions are bands of painful, rigid tissue which can form in muscles, the tendons or ligaments and can lead to poor blood flow to the area as well as limitation of movement, leading to pain.

Physical Therapy Modalities

Muscle Stimulation

This type of therapy uses light electrical pulses that are transmitted to specific areas of the body through electrodes placed on the skin. There are many different types of electrical stimulation. Some are more beneficial for pain relief or to reduce inflammation, some best treat muscle spasm, and some actually cause muscles to contract in order to reduce muscle atrophy. Some forms of electrical stimulation have combination effects.

Transcutaneous Electric Nerve Stimulation (TENS)

A TENS unit is a small, battery-powered, portable muscle stimulation machine that can be used at home to help control pain. Variable intensities of electric current are used to control pain. This treatment is recommended to help patients get through periods of severe (acute) pain. TENS units are typically not recommended for chronic pain.

In fact, a 2009 report from the American Academy of Neurology found that TENS units are not effective at treating chronic low back pain.

Ultrasound

Therapeutic ultrasound is a form of deep heat therapy created by sound waves.

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When applied to soft tissues and joints, the sound waves are a form of micro- massage that help reduce swelling, increase blood flow, and decrease pain, stiffness, and muscle spasms.

Ice and Heat Therapy

Ice and heat have long been used to treat many painful conditions. Ice therapy is often used to reduce swelling and help control pain immediately after an injury. Heat therapy is used to relax the muscles, increase circulation, and can provide relief to patients with chronic pain. Depending on the patient's condition, a combination of ice and heat can be used.

Diet and Nutritional Counseling

Studies have shown that poor diet and nutritional imbalances contribute to several serious illnesses, such as heart disease, stroke, diabetes, and cancer.

Chiropractors are specifically trained in diet and nutritional counseling. Your chiropractor can design a nutritional program specific to your needs that can help you maintain good health and minimize the risk of developing these serious health conditions.

Lifestyle Modification Counseling

Good health is much more than the absence of pain or disease. The lifestyle choices you make on a daily basis can greatly affect your longterm health. We now know that years of seemingly small unhealthy lifestyle choices can, over time, turn into very large health problems. Examples of lifestyle choices and behaviors that can have negative effects on your health include:

- Lack of regular exercise
- Smoking
- Poor diet
- Excessive mental stress
- Over-reliance on medication
- Excessive consumption of alcohol
- Poor posture
- Improper lifting



Soft Tissue Manual Therapy

Massage therapists use a variety of hands-on soft tissue therapies to improve the function of the soft tissues (muscles, ligaments, tendons, and joint).

These include pin and stretch, also known under a proprietary name Active Release Technique (ART), and instrument-assisted soft tissue mobilization (Graston Technique).

MOBILISATION

Body Mobilisation Techniques

BMT uniquely combines movement, stretches and trigger point work.

Adding this dynamic massage and movement approach to their work will give therapists vastly improved therapeutic results:

-Pain free range of motion is established.

-Gentle "distracted" stretching offers a restoration and. improvement of movement.

-Mobilisations in massage therapy can be used to treat both joints and soft tissues.

Joint mobilisations is when a bone or vertebrae is moved to relieve painful tension, stiffness, pain and improve range of movement.

Joint mobilisations are performed with various pressures and are graded one to five.

The pressure used with joint mobilisations is dependent on desired outcomes.



Soft tissue mobilisations are a specific treatment that is used to loosen tightness and reduce pain in the body through manual movements.

Soft tissues refer to muscles, ligaments, tendons and connective tissue known as fascia.

Soft tissue mobilisations can be applied in varied amounts of pressure through different stroke patterns directly against soft tissues.

Mobilisations can increase range of movement and strength within a muscle.

Massage therapists at physio.uk commonly use joint and soft tissue mobilisations to treat a range of conditions.

Soft tissue mobilisations are used to treat tight muscles. Tight muscles can occur for many reasons.

Muscles can tighten due to soft tissue damage, increased tone and muscle contractions.

The causes of muscles to go tight can range from overuse to emotional stress. Mobilisations can target tight areas of soft tissues and help to loosen them.

Soft tissue mobilisations apply pressure onto the tight muscles and stretch and elongate the muscle fibres. Friction of the mobilisation technique also causes an increase of blood flow to the muscle and temperature to increase.

When temperature increases, the muscle fibres relax and loosen allowing more movement.

Soft tissue and joint mobilisations can both be used as massage therapy techniques to help post injury.

After injury, soft tissues and joints can be left tight and restricted.

When an injury has occurred in the soft tissues, adhesion and scar tissue is formed as part of the healing process.

Adhesion and scar tissue are hard and rigid in texture and can limit movement.

Soft tissue mobilisations can help loosen restrictive tissues around an affected area.

Mobilisations will help realign muscle fibres back into normal form and increase range of movement.

Mobilisations performed onto the joint can help clear tension and relieve pain.

Both techniques together can contribute to the recovery process of injuries.

Joint and soft tissue mobilisations can both be used to treat pain. Pain can occur in muscles due to an increase of tension and tightness.

Soft tissue mobilisation manipulates tissues so that blood circulation is increased to an area. Increased blood circulation allows muscles to relax and muscle fibres to be loosened. Joints commonly become stiff causing pain.

A joint mobilisation technique can help reduce stiffness by creating more movement in a joint.

Mobilisations can help treat joint stiffness. Joint stiffness is a common symptom to occur within many joints in the body. When joints become stiff, movement is limited causing an increase of pain. Joint mobilisations begin to move joints so that they are loosened and movement is restored.

What are the benefits of mobilisations?

Mobilisations have many benefits. The benefits of joint and soft tissue mobilisations include:



- Increased soft tissue flexibility
- Muscles Relaxation
- Break down or reduce adhesions.
- Improve range of motion.
- Lengthen muscles and tendons.
- Reduce swelling and edema.
- Decrease pain.
- Restore functionality.

Mobilisations are beneficial to increasing flexibility. Soft tissue mobilisations are applied with pressure onto the muscle. Mobilisations help increase the temperature and relaxation of the muscles.

Mobilisation can help stretch and elongate the muscle fibres that increase flexibility.

Flexibility is important to prevent injuries forms occurring and maintaining movements around a joint.

Mobilisations are also effective to relief tight muscles.

Tight muscles can lead to strains and pulls that can immobilise a joint. Mobilisations help tight muscles by increasing the temperature, increasing circulation and increasing tissue elasticity.

Relieving tight muscles can help prevent injuries and enhance athletic performance.

Joint mobilisations are effective to treat stiffness and increase range of movement within a joint.

Stiff joints can occur for a number of reasons.

When joint stiffen, movement is restricted and can lead to chronic pain.

Joint mobilisations begin to move bones so that tension is relieved and movement is increased.



Mobilisations can be used to help on both joints and soft tissues. The occasions when joint and soft tissue mobilisations are used include:

-Tight Muscles

-Post injuries

-Pain

-Joint stiffness

Common body parts treated by mobilisations

There are many common body parts and joints that can be treated with mobilisations.

Common body parts treated by mobilisations are:

-Arm -Shoulder -Lower back -Upper back -Calf -Lumbar area strain -Quadratus Lumborum (QL) -Lumbar Erectors, Psoas / Iliacus -Thoracic -Glutes / Piriformis / Hip Rotators -Infraspinatus muscle release and scapula rotation and Mobilisation -Superior and inferior/ posterior and Anterior leg muscles

Joint and soft tissue mobilisations can also be performed on other areas of the body and be effective to reduce pain and tension.

What is deep tissue mobilisation?

As the name suggests, manual deep tissue mobilisation is a physical therapy technique that is used to release tightness in muscles, fascia, ligaments and other soft tissue.



Therapeutic Stretches

Following an injury, therapeutic stretching is an important way to prevent scar tissue from forming. Even after the spinal injury has healed, maintaining a regular stretching program helps keep tissues flexible, increases mobility, and protects you from new injuries. As with exercise, your chiropractor will instruct you on proper stretching techniques and will supervise you until you are comfortable enough to do them on your own.

Deep tissue mobilisation,

Also important therapeutic techniques in manual therapy industries, bines moving and jolting joints, massage, exercise, and physical therapy.

It's designed to relieve pressure on joints, reduce inflammation, and improve nerve function. It's often used to treat back, neck, shoulder, and headache pain.



back pain is a common and costly condition.

Deep Tissue Massage Mobilisation-3D therapy is a treatment supported in some guidelines, although most clinical trials



protocols that are scalable in clinical practice. Prior work has identified effects on muscles stiffness and lumbar multifidus activation as possible mechanisms.

Selected Treatment Techniques

The latissimus dorsi

is a large, flat muscle covering the width of the middle and lower back.

It connects the bone of the upper arm to the spine and the hip. This muscle is often referred to as the lats.

Pain in the latissimus dorsi is often caused by overuse, or it may be a result of poor technique in sports or similar activities. Fortunately, several exercises can help to prevent or relieve this pain.

What are the symptoms of latissimus dorsi pain?



The latissimus dorsi muscle covers the width of the middle and lower back and is more commonly known as the lats. It may be difficult to tell whether the pain is located in the latissimus dorsi or other muscles in the shoulders or back. When the latissimus dorsi is injured, a person may feel pain in several places, including:



- the lower, middle, and upper back
- the back of the shoulders
- the base of the scapula, commonly known as the shoulder blade
- the inside of the arms, extending down to the fingers
- the lower arms

In some cases, the pain will occur without warning, and it can be felt in surrounding muscles.

This pain often worsens when the person extends their hands to the front, raises their hands above their head, or throws an object.

The latissimus dorsi is used in everyday activities, including:

- expanding the chest for breathing
- pushing against armrests of a chair to stand

It is also used during sports or workouts that feature:

- weightlifting with the upper body
- rowing
- throwing
- performing bench-presses

Damage to the latissimus dorsi can cause other symptoms. They may include:

- tingling in the lower arms
- difficulty breathing
- tendonitis in the middle and lower back

Consult a doctor when the source of back pain cannot be identified, or if it is accompanied by: fever, trouble breathing, and abdominal pain

These could be symptoms of a more severe condition.

The most common causes of pain

The most common causes of pain result from overuse of the muscle and poor technique when working out.

Below are the most common causes of pain:

- overuse of the muscle
- poor technique
- exercising without warming up

A person may be at greater risk of injury if they:

- have poor posture
- continually reach overhead
- chop wood
- frequently shovel
- golf
- play baseball
- row
- ski

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- swim
- play tennis
- do exercises such as pull-ups or lat pulldowns

It is possible to tear the latissimus dorsi, and athletes are at particular risk. Some athletes most likely to injure this muscle include:

- water skiers
- golfers
- pitchers
- gymnasts

Treatments

Exercises

Certain exercises can alleviate pain associated with the latissimus dorsi and strengthen the muscle to prevent further injury.

It is essential that a person consult an expert, such as a doctor or personal trainer, to ensure that the exercises are right for them and that they are using correct form.

The following two exercises can reduce latissimus dorsi pain. A doctor can recommend how often a person should perform these exercises. Never continue an exercise that is painful or too uncomfortable:



The back bow yoga pose can help reduce pain and strengthen the muscle.

This pose is often referred to as "the Superman," because it resembles how he flies.

To perform back bow:

- Lay facedown on a yoga mat.
- Extend straightened legs and arms away from the body, so that the arms are in front of the head.
- Use the back to raise the shoulders and extended limbs toward the ceiling.
- Hold the position for 10 seconds before lowering.

Pelvic raise or lift

- To perform this exercise, a person should:
- Lay flat on the back with the arms at the sides.
- Bend the legs so that the heels are closer to the buttocks.
- Lift the pelvis toward the ceiling.
- Slowly lower it to the floor, keeping the hands and feet in place.



Lumbar Strain

What is a lumbar strain?

A lumbar strain is an injury to the lower back. This results in damaged tendons and muscles that can spasm and feel sore.

The lumbar vertebra makes up the section of the spine in your lower back.

What causes lumbar strain?

Injury can damage the tendons and muscles in the lower back. Pushing and pulling sports, such as weight lifting or football, can lead to a lumbar strain.

In addition, sports that require sudden twisting of the lower back, such as in tennis, basketball, baseball, and golf, can lead to this injury.

Certain risk factors, such as excessive lower back curvature, forward-tilted pelvis, weak back, or abdominal muscles, and tight hamstrings, can increase the risk for this injury.

What are the symptoms of lumbar strain?

The following are the most common symptoms of a lumbar strain. However, each person may experience symptoms differently. Symptoms may include:

- Sudden lower back pain
- Spasms in the lower back that result in more severe pain
- Lower back feels sore to the touch

The symptoms of a lumbar strain may resemble other conditions and medical problems.

Always talk with your healthcare provider for a diagnosis.



How is lumbar strain diagnosed?

In addition to a complete medical history and physical exam, diagnostic procedures for low back pain may include the following.

However, during many initial assessments and exams, specialized tests aren't usually recommended.

• X-ray

A diagnostic test that produces images of internal tissues, bones, and organs onto film.

• Computed tomography scan (also called a CT or CAT scan)

This is an imaging test that uses X-rays and a computer to make detailed images of the body.

A CT scan shows details of the bones, muscles, fat, and organs.

A CT scan shows detailed images of bones, muscles, fat, and organs.





• Magnetic resonance imaging (MRI)

A diagnostic procedure that uses a combination of large magnets, radiofrequencies, and a computer to produce detailed images of organs and structures within the body.

• Radionuclide bone scan

A nuclear imaging technique that uses a very small amount of radioactive material, which is injected into the bloodstream to be detected by a scanner. This test shows blood flow to the bone and cell activity within the bone.

• Electromyogram (EMG)

A test to evaluate nerve and muscle function.

Treatment

How is lumbar strain treated?

Specific treatment for a lumbar strain will be discussed with you by your healthcare provider based on:

- Your age, overall health, and medical history
- Extent of the injury
- Your tolerance for specific medicines, procedures, and therapies
- Expectation for the course of the injury
- Your opinion or preference

Treatment may include:

- Rest
- Ice packs and/or heat and compression applied to the back
- Exercises (to strengthen the abdominal muscles)
- Stretching and strengthening exercises (for the lower back as it heals)
- Education regarding the use and wearing of appropriate protective equipment



• Deep tissue massage

• Trigger points pressure release

For more education about these Massage treatments:

PS: check <u>www.mareyelhamouly.com</u> . Marey El Hamouly Massage Masterclasses

When should I call my doctor?

Call your healthcare provider if any of the following happen:

- You're unable to stand or walk.
- You have a temperature over 101.0°F (38.3°C)
- You have frequent, painful, or bloody urination.
- You have severe abdominal pain.
- You have a sharp, stabbing pain.
- Your pain is constant.
- You have pain or numbness in your leg.
- You feel pain in a new area of your back.
- You notice that the pain isn't decreasing after more than a week.

Contact your doctor immediately for the following:

- Pain radiating down the leg
- Pain that is accompanied by fever, weakness in the leg, or loss of control of the bladder or bowels

Living with lumbar strain

<u>Cold reduces swelling</u>: both cold and heat can reduce pain. Protect your skin by placing a towel between your body and the ice or heat source.

- For the first few days, apply an ice pack for 15 to 20 minutes.
- After the first few days, try heat for 15 minutes at a time to ease pain.
- Never sleep on a heating pad.



• Over-the-counter medicines can help control pain and swelling. Try aspirin or ibuprofen.

Exercise

Exercise can help your back heal. It also helps your back get stronger and more flexible, preventing any reinjury. Ask your healthcare provider about specific exercises for your back.

Use good posture to avoid reinjury

- When moving, bend at the hips and knees. Don't bend at the waist or twist around.
- When lifting, keep the object close to your body. Don't try to lift more than you can handle.
- When sitting, keep your lower back supported. Use a rolled-up towel as needed.

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Key points about lumbar strain

- Lumbar refers to your lower back.
- Strain can cause damage to the tendons and muscles causing pain and soreness.
- Nonsurgical methods can cure most low back pain.
- Call your healthcare provider if symptoms don't get better over the next several days or if symptoms get worse.

Lumbar Muscles Psoas Major	Function Flexes thigh at hip joint & vertebral column
Intertransversarii Lateralis	Lateral flexion of vertebral column
Quadratus Lumborum:	Lateral flexion of vertebral column
Interspinales:	Extends vertebral column





Lumbar Muscles



Quadratus Lumborum (QL)

The QL is another very important but also trouble-causing muscle when it comes to low back function and health. When it is tight it often pulls the pelvis upward and affects the position of and tension on the spinal joints, including the discs and nerves.



It is a deep, strong and flat muscle that is often very sensitive but responds well to deep tissue massage and Active Release treatments.



Lumbar Erectors

These muscles are important postural muscles that very often get stained, either directly or secondary to an injury to surrounding tissues and joints. For example, if there is compression of the facet joints or very tight hip flexors pulling the pelvis and spine forward, or if there is a herniated disc, these muscles will very often go into overdrive to protect the injured areas. In addition, these muscles can get very easily strained due to bending motions while lifting heavy weights and objects.

Lumbar Erectors



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The Lumbar Erectors are very easy and important to treat in most cases of low back pain and injury.

Deep Tissue Massage, Trigger Point Therapy, Myofascial Release, Swedish Massage, Deep Tissue Massage Mobilisation and Active Release Techniques are all great ways to treat these muscles and the combination of multiple modalities can be very effective.

It's important to note that if there is a primary injury that treating these muscles alone at best will only give temporary relief but treating them as part of a comprehensive strategy is potentially very helpful for getting rid of nagging and serious back pain.

Psoas / Iliacus

These muscles are very important but often very problematic. They are powerful hip flexors and the psoas specifically also flexes and creates some stability in the spine.

Unfortunately these muscles can effect on the low back region because they can become very shortened, fibrotic and inflexible, primarily because of prolonged hours upon hours of sitting.

When these muscles are tight and short, they will pull the pelvis forward and compress the lumbar spine.





They can also in essence help de-activate the glute muscles which need to be active and strong for low back injury prevention and recovery.

Active Release and Trigger Point Therapy treatments on the psoas and illiacus can be very uncomfortable but the benefits are well worth it.

Releasing these muscles can be a game changer when it comes to chronic low back pain.

Glutes / Piriformis / Hip Rotators

It is very rare that I do not treat the glutes and hip rotators in some way when treating clients for low back pain.

These muscles commonly develop trigger points, muscle adhesions and decreased range of motion in so many people, even those without back pain.

Sometimes I'll only need to treat individual muscles or just the muscles on one side of the hip and pelvis.

This depends on many factors including where the pain is and what the person's posture and biomechanics tell me about what may be relevant to their low back issues.







Scapula Muscle Spasm



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Your scapulae are the triangle shaped bones that sit either side of your upper back and are often referred to as your shoulder blades.

The muscles surrounding are responsible for moving you shoulder and arm and also assist in providing shoulder stability.

If they become spamsed (either acutely or chronically) they can be very painful and impact how you engage in every day activities.

There are a few major differences between acute and chronic muscle spasms that will dictate which treatments are most effective and appropriate.

Acute muscle spasming is when the muscle contracts suddenly for a short period of time. This may occur in the form of a cramp where the scapula muscles contract rapidly for a few seconds to a few minutes before relaxing.

This process is involuntary and can be mildly, moderately or severely painful.

Chronic scapular muscle spasming, however, is when the muscle slowly become tighter with time and does not relax.

This may occur over a few days, weeks or months and can cause people to be in pain frequently. The causes of both acute and chronic scapula muscle spasm also differ.

Causes for Chronic Scapula Muscle Spasm

• Poor posture: Throughout the day it may be difficult to maintain good posture, especially during sitting.

Prolonged poor posture (slouching or rolling your shoulder forward) can put excess strain on the scapula muscles, causing them to become fatigued and spasmed.



- Over use: Frequent and repetitive use of the scapula muscles can also cause them to spasm. If you are regularly lifting, carrying or moving heavy items for most of your week, you may be over using the muscles around your scapula, and cause them to have difficulty relaxing.
- Stress: Although it might not seem like stress is related to scapula muscle pain, there is good evidence that mental and emotional stress can cause muscle tightness.

Prolonged stress can cause the low but constant activation of the scapula muscles, meaning you could be tensing them for a large portion of the day.

This can result in tightness across your whole upper back and cause the muscles to go into spasm.

• Awkward sleeping postures: Most adults tend to stay in relatively the same position for the duration of the time they spend sleeping. Sleeping in an awkward posture where your back is not supported properly can cause contraction of the scapula muscles throughout the night.

Causes for Acute Scapula Muscle Spasm

• Dehydration: Your muscles require enough water to function properly. Although you may not feel thirsty throughout the day, it is important to continually hydrate yourself.

Your muscles require water to contract and relax properly. Unfortunately, beverages such as tea and coffee can not hydrate you as they contain caffeine.

Even though these beverages also contain water, the caffeine in them has a diuretic affect; meaning they encourage the body to get rid of fluids through urination.

• Low Potassium Levels: Potassium is an electrolyte that has a direct role in muscle contraction and relaxation.

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Potassium can be lost through sweat and urination and can be the main cause of acute muscle spasms and cramps.Low Magnesium: Magnesium also plays an important role

in the relaxation of muscles.

Magnesium works by encouraging the brain to send relaxing nerve signals to your scapula muscles. Low magnesium levels could impact your muscles ability to relax after a workout or at night, causing cramps in your scapula muscles.

• Low Vitamin D Levels: Vitamin D has an important role in proper muscle function despite its more common relation to bone health.

Vitamin D assists the absorption of calcium and magnesium – both which are vital for smooth muscle contractions.

So even if you are getting adequate magnesium and calcium intake, if you have low vitamin D levels, your body may not be able to absorb and use it effectively.

Whether you are experiencing chronic or acute scapula muscle spasm, there are effective options to get relief from both.

Treatments:

Chronic Scapula Muscle Spasm treatment:

Soft Tissue Occupational Therapy:

Soft Tissue and Deep Tissue Occupational Therapists specialise in treating people with chronic muscle spasming.

They treat using hands on techniques to release muscle tension, increase mobility and decrease pain.



Soft Tissue Occupational Therapists also work to improve the strength and flexibility of weak, tight muscles, and also increase joint stability.

They also work holistically, that is, they assess not just how your scapula muscle spasm pain may in impacting your movement, but also your daily activities including your work and leisure activities.

Heat:

Heat is an effective was to reduce scapula muscle spasm pain at home. Heat helps to relax tight muscles, easing pain and increasing blood flow. Blood is vital for muscle function as it brings nutrients and oxygen into the muscle and carries out toxins and waste from normal metabolic functions. When blood flow is increased to the muscles, they can heal effectively and will become less painful.

Stretching:

Regular stretching is beneficial for decreasing muscle pain, and preventing further tightness. Stretching increases the length of muscles, assisting in muscle relaxation and preventing contractures. There are a few different stretches you can do daily that target different muscles around your scapula.

• Rhomboid stretch: your rhomboids are located between your scapular and your spine and can often be the cause of scapula muscle pain.

To stretch your rhomboids, clasp your hands together and straighten your arms at shoulder height.

Reach your hands away from your chest and round your back.

It may help to imagine the pushing the centre of your back away from you. Hold for 30 seconds and repeat 1-2 times.





RHOMBOIDS PAIN LOCATION

Beside of the massage treatment, Ask your clients to do stretches at home







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Pectoralis Stretch: your pectoral muscles are large flat muscles covering your chest and assist the scapula muscles in moving the arm, when these become tight they may over stretch the muscles of your upper back, causing fatigue and pain. It is also important to stretch your pectoral muscles when you stretch your rhomboids to ensure even muscle balance.

To stretch your pectorals, start by standing next to a door frame and hold your arm out to the side at shoulder height, with your elbow at a right angle.

Place your forearm and elbow on the door frame and lean forward until you feel a stretch on your chest. Hold for 30 seconds and repeat both sides.



You may also complete this stretch bilaterally.



<u>Acute</u> Scapula Muscle Spasm treatment:

Water: Increasing your water intake may be all you need to do to get rid of acute muscle spasms and cramps in your scapula muscles.

How much you need to drink will depend on your personal circumstances, but a drink bottle a day is a good start.

During hot weather and exercise, it is particularly important to up your intake of water as you will also lose it through sweating.

Making sure you have a drink bottle at work that you can refill is a good reminder to keep drinking during the day.

Increase your potassium levels:

If you find that increasing your water intake is not relieving your acute scapula muscle spasms, you can also look at increasing your potassium intake.

Hydralyte and coconut water are both good sources of potassium to add to your diet.



Magnesium supplements:

Magnesium can also be useful to help muscles relax. Magnesium supplements are readily available from super markets and chemists. There are a large variety of magnesium pills, powders and capsules on the market but not all of them are effective.

Magnesium powder is easily absorbed by your body compared to tablets, and magnesium amino acid chelate is the most bioavailable form.

Vitamin D: If none of the above treatments are providing you with relief from scapula muscle spasm pain, it may be worth looking into your vitamin D levels.

You can talk to your GP if you think you may be deficient. Vitamin D can be found in fatty fish such as tuna, mackerel and salmon.

Thoracic Spine

The thoracic spine is the largest segment of the spine. Whereas the cervical spine has 7 small vertebrae and the lumbar spine has 5, the thoracic spine is made up of 12. All 12 ribs attach to the sides of each thoracic spine vertebra, essentially making the thoracic spine the anchor point for the containment system of the body's major organs. Mobility in the thoracic spine is important but often times restricted due to poor posture.

Upper and Lower / back and front Leg Muscles

Superior and inferior / posterior and Anterior Legs Muscles

We all have the same main leg muscles: quadriceps, hamstrings, adductors, shins, and calves.

Within those larger muscle groups, though, there are several smaller muscles, each with their own unique function(s)—adduction, flexion, extension, rotation.







Upper Leg Muscles

The thigh of the leg has three major muscle groups to move the leg forward, backward, and towards the midline of the body. These muscles surround and control the movement of the femur, which is the longest and strongest bone in the body.

- The posterior, or back, leg muscles for the upper leg are the hamstrings.
- The anterior, or front upper leg muscles are the quadriceps.
- The medial, or towards the middle of the body, upper leg muscles are the adductors.

Hamstrings

The **hamstrings** are on the back of the thigh and they have some control over hip and knee movement. They can bend the hips to bring the legs in line with the torso and bend the knees to bring


them out of line with the thighs. They attach to the hip at the top and the tibia at the knee. The hamstrings are made up of three muscles

- Biceps femoris: this muscle begins in the thigh and connects to the end of the fibula near the knee; it is responsible for flexing the knee
- Semimembranosus: this muscle begins in the pelvis and attaches to the tibia. It extends the thigh, flexes the knee, and aids in the rotation of the tibia.
- Semitendinosus: this muscle aids in the extension of the thigh and flexing of the knee

Quadriceps

The **quadriceps** are the muscles on the front of the thigh. They are one of the major leg extensors that straighten the knee from a bent position and flex the hip; they oppose the forces of the hamstrings on the knee. The quadriceps are a group of four muscles:

- Vastus lateralis: this muscle is on the outside of the thigh and is the largest of the quadriceps, it begins on top of the femur and extends to the patella
- Vastus medialis: this muscle is located on the inner thigh and it attaches on the femur and attaches to the kneecap
- Vastus intermedius: this muscle sits between the vastus medialis and the vastus lateralis along the front of the femur
- Rectus femoris: this muscle begins at the hip bone and attaches to the kneecap; it has the least flexion on the knee

Adductors

The **adductors** are located on the medial, inside of the thigh. They move the femur towards the midline when the leg is extended outward to the side and also have some pull in rotating the thigh, extending the hip, and flexing the knee. This group is made up of five muscles:



- Adductor brevis: this muscle can adduct the thigh at the hip and also medially rotate the thigh; it begins at the pubic bone and inserts into the femur
- Adductor longus: this muscle is located in the front of the adductors; it begins below the pubic tubercle and inserts along the medial lip of the femur; it contributes to lateral and medial rotation of the thigh
- Adductor magnus: this muscle is the closest to the middle of the adductors; it starts at the sitz bone and inserts on multiple places of the femur; it is helpful in stability of the leg under the weight of the body
- Pectineus: this muscle helps with medial rotation of the thigh and flexing of the thigh at the hip
- Gracilis: this muscle helps to flex the leg at the knee

Lower Leg Muscles

The lower leg has two muscle groups to move the ankle, foot, and toes. The bones of the lower leg are the tibia and fibula. The tibia bears most of the weight, and the fibula serves as attachment points for the lower leg muscles.

- The largest muscle group in the lower leg are the **calves**
- The two **tibialis** and three **peroneus** muscles are also found in the lower leg

Calves

The calves are located on the posterior of the lower leg. They help control the movement of the foot, and they are each made up of three muscles.

- Gastrocnemius: the main muscle of the calf, connects to the heel of the foot.
- It affects the ankle by causing **plantar flexion** or pointing the toes of the foot
- Soleus: this muscle is behind the gastrocnemius and is important in walking and Top of Form



Type of the clients

4 basic personality types

Driver

Motivator

Thinker

Supporter

Driver (Decisive)

Goal oriented, has a plan and sets out to achieve it. Confident and handles stress well.

Skips all the "fluff" just wants the bottom line. Workaholic, works independently.

FOR PATIENTS:

Give the four things every patient wants to know in order and quickly!

- 1. Can you help me
- 2. How long will this take
- 3. What's this going to cost me
- 4. Will it last



Motivator (Expressive)

Outgoing, enthusiastic, fast paced, optimistic. Builds report and relationships easily, usually a motivator in the group, trusting, loves praise.

FOR PATIENTS:

Focus that there is hope and you are excited for them. Tell them of

all the things that they will be able to do after the treatment is finished.

Thinker (Analytical)

Detailed oriented, analytical and logical. Likes consistency and continuity. Loves the facts.

FOR PATIENTS:

Stress the statistical success, the research data, tell them where to

search for information on you and the procedures on the web.

Give them testimonials and references.

Give them all the data but with stats to back it up.

Supporter (Amiable)

Very calm and consistent. Always on time. Works well with others and is a team player.

Compassionate and well liked.

FOR PATIENTS:

Give office tour. Let them meet the "team" that will be



treating them Let them know that you have a program that is structured and tailored for them.

There are usually six tests commonly run at the start of initial, re-exam, and final patient visit, they are known as 'Vitals'

Weight
Temperature
Pulse
Blood Pressure
Respiration
Pain

Precautions

The therapist should ask the patient about his/her medical history before the treatment begins, it's important to know if she is - or think she may be - pregnant.

This protects your rights either as an employer or employee, the law states that the employer must provide a safe working environment, provide health and safety training for staff, produce a written policy of the company's health and safety policy, and ensure that anyone on their premises is not exposed to any health or safety risks.

Medical Disclaimer

It is advised that you take medical advice if you or any of your clients have a health problem and any qualification from Marey El Hamouly will not be enough to qualify you to advise on any medical condition or to diagnose a condition.

PS: Test is an obligation to receive your certificate

I sincerely hope that together we may continue to enlighten the world about the value of massage therapy in our health care system today and into the future.



Regards

Marey El Hamouly

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