THE MYOFASCIAL VACUUM CUPPING MANUAL

An Essential Tool for the Remedial Therapist for Soft Tissue Mobilisation & Practitioner Stress reduction

Plus

Bonus 3 Chapters on the use of Treatment Tools Smooth Edged Tools / T Bars and Spiky Treatment Balls to Maximise Practitioner Effectiveness & Minimise Stress

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Providing Excellence in Post Graduate Education for the Soft Tissue Therapy Profession
AUSTRALASIAN COLLEGE OF SOFT TISSUE THERAPY PROFESSIONAL EDUCATION SERIES FOR SUPERIOR CLINICAL OUTCOMES BENEFITTING PRACTITIONERS & THEIR PATIENTS

EXCELLENCE IN PRACTICE SERIES FOR REMEDIAL THERAPISTS

WITH

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THE MYOFASCIAL VACUUM CUPPING MANUAL

An Essential Tool for the Remedial Therapist for Soft Tissue Mobilisation & Practitioner Stress reduction

Practitioners Should Be Aware That Full Patient Assessment Should Proceed any Treatment Intervention. That Assessment Will Include A Comprehensive Patient Subjective And Objective Examination.

It Is Vital That Causative Factors Of The Patients Presenting Dysfunction Be Assessed And Addressed As A First Line Priority.

It Is Essential That Myofascial Vacuum Cupping Is Conducted As A Painfree Modality

This Technique has the potential to cause Soft Tissue injury if used too aggressively SO study the underpinning knowledge component carefully and begin with a conservative approach until you develop competency.
PART 1

Myofascial Vacuum Cupping (MVC) The Fundamental Principles

1) Course Introduction – History, Description, Equipment and the Context

2) Why is Myofascial Vacuum Cupping an essential Clinical Modality for the Remedial Therapist?

3) How does Myofascial Vacuum Cupping positively change tissue mobility?

4) Body regions most suited for the technique

5) Selection of Appropriate Patients

6) Contra-Indications to Vacuum Cupping

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Practical Application of Myofascial Vacuum Cupping

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PART 3

The Use of Soft Tissue Treatment Tools in Clinical Practice

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16) Myofascial mobilisation and de-activation of symptomatic points using Spikey balls as a Treatment tool.
PART 1

Myofascial Vacuum Cupping The Fundamental Principles

1. Course Introduction – History, Description, Equipment and the Context

History of Use:
This treatment technique, dates back to 1550 BC in Egypt. In Chinese medicine there is evidence of continued use from around 28AD to the current day (Chirali 1999)

It has been used by many cultures throughout the world to relieve various musculo-skeletal and systemic symptoms however our explicit focus is on the mobilisation of the fascial system.

Description of the Technique:
A Vacuum pump, or direct flame, is used to induce a vacuum inside a cylinder sealed to the skin by the use of oil or cream.

The vacuum “draws” the soft tissue perpendicular to the skin thus providing a tensile force to the soft tissue system, which can be left in one site for a prolonged period (with caution) or moved along the tissue.
The Equipment:

Plastic Cupping sets that utilise a vacuum pump are widely available in a range of styles and quality. The cost can range from A$35 to $180. If possible obtain a recommendation from a practitioner, in your area, who regularly uses this technique. I would recommend purchasing a high quality set as we will also advise later in this manual to utilise the smooth edge of the cup as a treatment tool. This technique requires a level of sound structure in the cup.

*It is important to inspect the valve on the cups and the pump, and its flexible “point of seal” for quality.*

In the traditional context the vacuum was created by the use of direct flame (usually a cotton pad dipped in metholated spirit is lit and briefly placed within the cup. The cup is then quickly placed on the skin.

*Inducing a vacuum in a Glass Cup via direct flame*

*Source: MindBodySpirit 2010*
Comparison of the two techniques used to induce the Vacuum: Use of a Pump versus use of direct Flame:

Pump Induced Vacuum:
Positives: Able to accurately induce the exact degree of vacuum “dosage”
No need to used flame in the clinical situation.
Negatives: More expensive A$40 - $160 per set.

Flame induced Vacuum:
Positives: Relatively inexpensive (45mm cup A$6.00)
Negatives: Need to use open flame in the clinical situation.
More difficult to accurately induce the exact degree of vacuum “dosage”

Our recommendation is overwhelmingly in favour of the Pump method.

Tips on using the equipment:

When placing the pump on the cup do so lightly so that the process of removing the pump is very easy. There is no need to forcibly fix the pump to the cup and it will seal sufficiently with a light application.

On some of the cheaper cupping sets, the one-way valve which sits on top of the cup, is openly exposed and it easily “tripped” by the edge of the pump when you remove it from the cup.
To prevent this from happening ensure that when you remove the pump from the cup you take it up vertically. If not you may touch the valve and cause the cup to loose vacuum.
Defining the parameters For Myofascial Vacuum Cupping: The Clinical Context

We are using this Modality in a Western Musculo-skeletal medicine context to mobilise the Myo-fascial system specifically.

In this context it is simply not indicated to mobilise the Myofascial system with an aggressive approach.

You can achieve the clinical outcomes you desire with this more conservative approach.

We respect the traditions that this technique has come from but we will take a different path to that of Chinese Medicine.

One vitally important aspect to the way we advocate any soft tissue work is that it is done in a way that advances your reputation and never diminishes it. A clear objective to the way I practice is to gain the trust of the main health practitioners who make health policy. In Australia that is the Medical Practitioners (Medical Doctors). These practitioners may well be “put off” if they see patients with circular bruises caused by the “stronger”, more aggressive application of vacuum cups. They are not seeing the patient through the same eyes as a Chinese Medical practitioner so they may not have an understanding of the technique. In order to prevent any misunderstanding of the way you practice I recommend you adopt a more conservative approach.

2. Why is Myofascial Vacuum Cupping an essential Clinical Modality for the Remedial Therapist?

Firstly to effectively mobilise the dysfunctional components of the myofascial tissue to restore mobility and function. The technique is especially targeted to the Superficial fascial layer (Non-dense, Loose, Aerolar layer) and the next deepest layer, the Epimysium which is the connective tissue sac that surrounds each muscle. This layer is a form of dense irregular connective tissue.

All the other structures within the muscle will be affected by the presence of the cup e.g. Vascular, neural, contractile and the other fascial elements.

Secondly to De-load stress from the Therapist. If we can satisfy our Clinical objectives with the use of an effective tool like Myofascial Vacuum Cupping, then this will certainly remove a quantity of stress from the therapists body and give you potentially greater longevity in the industry.
3. How does Myofascial Vacuum Cupping positively change tissue mobility?

Let us firstly discuss the types of soft tissue in our body especially focusing on the connective tissue.

<table>
<thead>
<tr>
<th>There are 4 Types of Primary Tissue to consider in the Human Body:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Muscular Tissue: Tissue which is specialized to contract and produce, control and stabilise movement</td>
</tr>
<tr>
<td>Nervous tissue: Tissue which is specialized to conduct electrical transmission</td>
</tr>
<tr>
<td>Epithelial tissue: The function of this tissue is in protection, secretion and in selective absorption. It is mainly composed of cells with little extracellular material</td>
</tr>
<tr>
<td>Connective Tissue: Tissue which is specialized to connect the components of the body. Mainly composed of extracellular material, for example collagen, with relatively few cells</td>
</tr>
</tbody>
</table>

We can consider the layers of tissue in our body from superficial to deep as the following.

<table>
<thead>
<tr>
<th>Superficial</th>
<th>Skin:</th>
<th>Epidermis &amp; Dermis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Superficial fascia:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Deep Fascia</td>
<td>Epimysium is connective tissue wrapping around the whole muscle and sometimes blends with the superficial fascia. It translates to ‘outside the muscle’ (Marieb, 2007 p.283).</td>
<td></td>
</tr>
<tr>
<td>Muscle</td>
<td>Perimysium is connective tissue that wraps around muscle fascicles (grouped bundles of muscle fibres) Endomysium is connective tissue that wraps around each individual muscle fibre. It literally means ‘within the muscle’ (Marieb, 2007 p.283). Inter-muscular fascia is the connective tissue that connects the connective tissue of one muscular structure to another.</td>
<td></td>
</tr>
<tr>
<td>Deep</td>
<td>Bone:</td>
<td>Periosteum is the connective tissue that covers the outer surface of the bone</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Compact bone</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Spongy bone</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Bone marrow</td>
</tr>
</tbody>
</table>

Connective Tissue is the one type of tissue that is continuous from the superficial to the deepest levels and by adding periostium (the outer most layer of tissue on the bone), continuous from all other directions (longitudinally, laterally and obliquely)
Layer Palpation Exercise:

1. Feel the skin at the level of approximately T 12 at the highest point of the Spinal erectors about 3 finger widths lateral to the mid line. Without sliding, feel how well or restricted the tissue moves superiorly, inferiorly, laterally & medially

2. Get your partner to contract their extensor muscles “Please very slowly try and lift your upper body off the table” You will feel the fascial layer (the epimysium) around the muscle become very obvious.

3. “Please Relax”. Now knowing that level and the level of the skin, feel for the layer in between these two layers, the Non-dense Areola (superficial) fascia. “Draw up” that layer between the skin & the deep fascia between your thumb & fingers and get a feel of the depth or thickness of this superficial fascial layer.

4. Now Focus your palpation on the level of the Epimysium and palpate deeper into the muscle encapsulated by the Epimysium how soft and compliant is the deeper tissue

5. Repeat the same exercise over the any Muscle in the body and see and feel how different these layers are in depth, feel and compliance.

6. Repeat the same exercise lying supine over your own abdomen 1/2 way between your umbilicus & your ASIS of the Pelvis. Do a partial situp and feel the tight epimysium around your Rectus Abdominis. Now relax and knowing that level and the level of the skin, feel for the layer in between these two layers, the Non-dense Areola (superficial) fascia. Does this feel different here? Perhaps it feels thicker, evidence of the presence of adipose (fat) cells deposited here.
Let us get to know the Connective Tissue in more detail:

It is composed of the Matrix and the Cells

A. The Matrix

Within the Matrix are the Fibres (Collagen & Elastin) and the Ground Substance

Different types of connective tissue will have a different concentration of these components:

Let us examine the Fibres in more detail. There are two categories of fibre: Collagen & Elastin

Collagen: There are about 20 different types of collagen

<table>
<thead>
<tr>
<th>Collagen Type</th>
<th>Structure</th>
<th>Examples</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type I</td>
<td>Thick Fibrils bundled into fibers</td>
<td>Tendon, ligament</td>
<td>Resists Tensile loads</td>
</tr>
<tr>
<td>Type II</td>
<td>Thin Fibrils</td>
<td>Cartilage, Nucleus pulposus of the intervertebral disc</td>
<td>Resists Compressive loads</td>
</tr>
<tr>
<td>Type III</td>
<td>Fibrils, Reticular Fibrils</td>
<td>Non dense Connective Tissue</td>
<td>Establish framework</td>
</tr>
<tr>
<td>Type IV &amp; VI</td>
<td></td>
<td>Loose Connective Tissue</td>
<td>Resists Tensile loads but can shear &amp; reform</td>
</tr>
</tbody>
</table>

Elastin: Elastin like Collagen is a protein. It has more elastic properties than Collagen and is more prevalent in tissue which must stretch and recoil to its original length
Ground Substance:

Forms the bulk of the space in non-dense Connective Tissue and is filled with Hydophilic (water binding) gel-like polymers called Glycoamino-glycans or Proteoglycans.

The “Water binding” properties of the Proteoglycans help the ground substance function in a protective, shock absorbing role.
The Ground Substance helps to distribute stresses and maintain an environment to support the cells and its other vital components.
It forms the environment for the fibres to exist functionally, in a 3D matrix capable of the compressive, tensile or shear forces that can be applied.

It allows nutrients and metabolites to move through the tissue.
It also allows vascular, lymph and neural structures to course through.

B. Cells
(Mainly Fibroblasts, the suffix “blast” indicates a producer
These incredible cells are able to produce Collagen, Elastin and the Ground substance)

The elements of a Fibroblast cell
Source: Health Education Assets Library, 2009

Let’s clarify the term Fascia
We need to use care in the use of the word FASCIA as it can mean many different things to many different people.
It is better to use the word that describes the exact tissue you want to describe rather than a blanket term like “fascia”
Types of Connective Tissue.

Langevin & Huijing (2009) suggest that there are 12 specific terms to describe specific aspects of connective tissue.

Dense connective tissue

Areolar (non-dense) connective tissue
Deep fascia
Interosseal membrane
Neurovascular tract
Intra and extra muscular aponeurosis

Superficial fascia
Intermuscular septa
Periost(ium)
Epimysium
Perimysium

Endomysium

The Langevin & Huijing (2009) article is a free download from International Journal of Therapeutic Massage and Bodywork and is well worth the study. Here is the link:

The two main types of Connective Tissue that interest us from a Myofascial Vacuum Cupping Soft Tissue treatment perspective are:

Dense (Irregular) Connective Tissue and
The Areolar (non-dense) Connective Tissue (Superficial fascia):

**Dense Regular Connective Tissue** describes that connective tissue which is found in Ligament, tendon and aponeuoses, comprises closely packed fibres which are predominantly collagen and have high tensile strength and high stiffness

**Dense Irregular Connective Tissue** describes that connective tissue which is found in the Deep Fascia like Epimysium, joint capsule and tendon sheath

**Areolar (non-dense) Connective Tissue** describes that connective tissue which is found in the fascial layer between the Skin & the deep irregular connective tissue (epimysium) which has a major impact on determining the shape of the body.
It has more sparsely arranged fibres and contains both Collagen and elastin. The fibres are not arranged in any specific direction and there is a wider range of cells apart from fibroblasts

**eg White blood cells, Mast Cells:** Formed in Bone Marrow and are important producers of substances involved in Immunity and tissue repair, **Plasma Cells:** Formed in Bone Marrow and produce anti-bodies. **Fat or Adipose Cells:** which is a “…connective-tissue cell specialized to synthesize and contain large globules of fat” Encyclopaedia Britannica 2009.

This layer blends with the Dermal layer of the Skin and the deep fascia and provides a medium for lymph, neural & vascular tissue to course through the body.

**Components of Areolar (non-dense) Connective Tissue**
**Maintenance of Connective Tissue Health.**
Ideal stress (stretching, compression and tension) is required to stimulate maintenance of health of all tissue in the human body. Fibre & Ground substance maintenance and production in connective tissue is certainly no different.

**What are some causes of Connective Tissue Dysfunction?**

**Excessive Stress** eg From postural stress, may result in overload or strain of the tissue resulting in the potential overproduction of specific substances eg collagen. This may be from inappropriate patterns of use involved in work or sport or from a direct blow or strain / tear of the tissue.

**Dissuse** or lack of movement can lead to a loss of stimulus for the fibroblasts to produce required fibre & ground substance and therefore a failure to maintain ideal levels of hydration.

It has been hypothesised that this reduced retention of water molecules may allow collagen fibres to approximate toward each other which in turn may cause them to bind together via collagen crosslinkages. This may limit that tissues ability to function optimally. The tissue may not be able to obtain optimal length and structures that are coursing through the tissue, for example neural and vascular tissue, may be restricted or "Impinged")

**How does Myofascial Vacuum Cupping positively change tissue mobility?**

There are a number of theories as to how external force like that applied from Myofascial Vacuum Cupping positively impacts on soft tissue. The following are 4 examples:

1. **The Stimulation of Fibroblast activation:**
2. **The Disruption of excessive collagen cross linkages:**
3. **The Thixotropic-like nature of connective tissue and**
4. **Through the Activation of mechano-receptors:**
The following are examples:

1. **The Stimulation of Fibroblast activation**: The applied force may stimulate the fibroblasts within the connective tissue to maintain an ideal level of glycoaminoglycans. This may permit optimal retention of water molecules to allow the ground substance to maintain an ideal volume.

   By maintaining this volume there will be less likelihood of adjacent collagen fibres binding to each other by the formation of unwanted crosslinkages.

2. **The Disruption of excessive collagen cross linkages**: The external force supplied may also disrupt any unnecessary collagen cross linkages that may already exist that are binding adjacent collagen fibres together. This disruption may allow the tissue to optimally elongate and stretch.

3. **The Thixotropic-like nature of connective tissue**: (or the Plastic deformation model) The founder of the Rolfing technique, Ida Rolf, used this explanation to account for the changes evident in fascial tissue after treatment – If something is thixotropic it means that it is capable of changing its state, for example, from a dense thickened form to a more fluid "plastic" form when external energy is applied.

   Many now discredit this concept in relation to connective tissue however if we advance an explanation of delayed thixotrophy where the effect occurs over time and NOT instantaneously post treatment it may still be a relevant concept.

4. **Through the Activation of mechano-receptors**: Clinician & researcher Robert Schleip in particular has thrown doubt on the above theories in favour of a more neurological explanation where mechano-receptors are activated by the application of external force. Robert stresses the need to treat the tissue from a number of directions to maximize the positive effect.

As the arguments continue and research develops our understanding more clearly, in my option, all the above theories may offer a component of the complete multifactorial, ultimate answer. What is certain is that Myofascial Vacuum Cupping has to potential effect changes in connective tissue and all the above theories provide a possible explanation of why that positive outcome is achieved.
4. Body regions most suited for the Myofascial Vacuum Cupping technique

Myofascial Vacuum Cupping is ideally suited to treating the superficial areolar layer and the deeper irregular dense layers around the following structures:
Upper Trapezius, and Levator Scapula
Deltoid
Thoraco-lumbar Fascia and Longissimus
Hamstrings and Quadriceps
Lateral & Anterior lower leg compartments

5. Selection of Appropriate Patients

When gaining competency with Vacuum cupping as a treatment modality, select “Robust” non-irritable patients with obvious Myofascial restriction. Avoid using the technique with patients with symptoms and presentations that are easily flared up and when provoked the symptoms take a significant time to settle. (Irritable patients).

The Use of Myofascial Vacuum Cupping technique in a hypersensitive patient.

The Myofascial Vacuum Cupping Technique can be very useful is some instances for a patient that is hypersensitive to compressive, download pressure. In this instance a light degree of Vacuum can be induced, where the skin lift is ½ the way up to the 1st guide line into the sealed cup (see section 7 Key Principles of Application of Myofascial Vacuum Cupping to maximising effectiveness and limiting adverse tissue reaction) In this situation, begin conservatively and carefully monitor the patients reaction.

6. Contra-Indications to Vacuum Cupping

Absolute Contra-Indications:
Skins lesions, skin fragility, Myofascial attachment sites to bone.
History of Vascular disease eg Previous incidents of Deep vein thrombosis Varicose veins
Vulnerable regions of the body such as the anterior and lateral cervical region, Femoral triangle of the groin, Medial upper arm, Popliteal & Cubital fossa and the abdomen are also contra-indicated to cupping.
Gross fascial dysfunction does not occur in these locations. Specific fascial dysfunction does occur and can be easily treated more precisely with hands on techniques.
**Relative Contra-Indications:**

**Pregnancy.** The release of Relaxin and other hormones during pregnancy, to allow the connective tissue in the pelvis to elongate and allow the child to move through the birth canal, may also cause the general fascia structure to change with less external force than the tissue in non-pregnancy mode. It is therefore wise, as with any technique during pregnancy, to be conservative and watch the tissue carefully to ensure adverse reaction doesn’t occur.

**Specific Medications, which may increase the risk of bruising.**

Eg Blood thinning medications like Asprin and Warfarin. This fact doesn’t prohibit Myofascial Vacuum Cupping but it is wise to be aware of the potential adverse reactions and to be conservative in your application of the technique. Long term users of Steroid medications may also be more susceptible to bruising.

Cupping can also cause excessive stress on the tenoperiosteal junction, where the muscle attaches to the bone, and even avulsion injury where a portion of the periosteum is pulled away from the bone, for example, on the medial shin (Soleus attachment to the medial tibia) and the lateral knee (Vastus Lateralis attachment to the lateral patella) hence the reason to stay clear of attachment sites to bone.
7. The 4 Key Principles of Application of Myofascial Vacuum Cupping to maximising effectiveness and limiting adverse tissue reaction

“In the style of Myofascial Vacuum Cupping that we are promoting, we aim to keep bruising to a minimum”

Cupping has the potential to significantly bruise tissue and this is to be avoided in the style of cupping we are advancing. Bruising is perfectly accepted in many traditional cupping styles but we avoid it if possible in the western sports medicine style we are advocating.

Photo showing the potential bruising of the tissue from vacuum cupping. While this reaction is common in the traditional methods of vacuum cupping, in the western model that we are recommending we attempt to keep bruising to a minimum.

Source: [http://home.indy.rr.com/mkimpel/Acupuncture/cuppingpix.htm](http://home.indy.rr.com/mkimpel/Acupuncture/cuppingpix.htm)

How to maximize the effectiveness of the treatment and limit adverse tissue reaction

The 4 Vital Signs to minimise bruising
A. Monitor Tissue colour
B. Limit the time of the tissue under Vacuum
C. Be aware of Patients skin type
D. Monitor the degree of Vacuum.

A. Watch and monitor the colour of the tissue being treated and do not allow the tissue to become a red/purple colour keep it to a pink colour. As soon as the colour changes to a red/purple remove the cup.

B. Don’t leave the cups on for more than 2 minutes initially.

C. Be aware of your patients skin type: Fair skin will bruise more easily than “olive” skin
D. Monitor the degree of Vacuum inside the cup by watching the degree of Skin raise within the vacuum cup to ensure it is not excessive. As a guide only draw the skin approximately ¼ of the way up to the 1st treatment line on the cup.

8. How to use the modality effectively in Clinical Practice

Preparing For Vacuum Cupping

A. Have the cups and pump CLEAN and within easy reach.

B. Ask Approval From The Patient Prior To Cupping:

C. Explain that it would be effective for their particular presentation to use vacuum cupping. Show the patient the cup and apply it to your arm to demonstrate the procedure. Explain that it MAY produce some minimal bruising. Do they have a situation where any degree of bruising might need to be avoided?
PART 2

Practical Application of Myofascial Vacuum Cupping

9. Practical Exercise 1 & 2: Mild Static Vacuum Cupping to the Thoraco-lumbar Fascia / Longissimus / Ilio-costalis / Lower to Upper Trapezius

Aim: To gain competency in the static application of vacuum cups. To gain competency in the key observational signs: Skin colour and skin lift

Equipment: 2 X Size 1 (45mm cups) and 2 X Size 2 (40mm cups) if there is insufficient space between the patients Spinous processes and the medial scapula border

1. Apply cream or oil to the above region, begin superior to the crest of the Ilium

2. Place a Size 1. (45mm) cup on the left side in the center of the Ilio-costalis / Longissimus Muscles and the Superficial Thoraco-lumbar fascia. Avoid contact with the Spinous Processes and the Iliac crest.

3. Use 1/2 Full Pump Stroke OR Monitor the level of Skin raise and stop at a point 3/4 ‘s the way up to the first cup line. Monitor also the Skin Colour. Ask the patient “How does it feel?” The response we want is “A mild Stretching feeling” or “Nothing”

RELEASE PRESSURE IMMEDIATELY: If Patients Feels: PAIN or ANY DISCOMFORT eg Excessive pinching
If you observe Red / Purple Skin Colour or Excessive Skin Raise

4. Place and secure a cup at the same place on the right

5. Remove the 1st cup and place it superior to the original position of the 1st cup (i.e. Still on the Left Longissimus)

6. Remove the 2nd cup and place it superior to the original position of the 2nd cup (i.e. Still on the Right Longissimus)

7. Continue this “leap frog” method until you reach the level of C7. Return to the starting position and repeat
Practical Exercise 2:
Repeat the previous exercise this time using 4 cups simultaneously

RELEASE PRESSURE IMMEDIATELY: If the Patient feels:
- PAIN or ANY DISCOMFORT eg Excessive pinching
- Or if you observe Red / Purple Skin Colour or
- Excessive Skin Raise within the Cup
10. Practical Exercise 3: Mild Sliding Vacuum Cupping: To the Thoraco-lumbar Fascia / Longissimus / Ilio-costalis / Lower Trapezius

Assessment of Thoracic Range of Motion: Seated Rotation & Lateral Flexion

**Palpatory Assessment**

<table>
<thead>
<tr>
<th>Assessment</th>
<th>Left</th>
<th>Right</th>
</tr>
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<tbody>
<tr>
<td>Seated Thoracic Rotation</td>
<td>____°</td>
<td>____°</td>
</tr>
<tr>
<td>Seated Lateral Flexion</td>
<td>____</td>
<td>____</td>
</tr>
</tbody>
</table>

Palpate to identify the Dysfunctional / Restrictive Tissue (Target Tissue)

**Instruction for the use of Sliding Cupping**

- Use liberal amounts of lubricant to allow the cup to freely move over the skin
- Use less Vacuum initially to allow free movement
- Use a small Zig-zag motion when gliding longitudinally to impact on as many mechanoreceptors as possible.

**Monitor the Skin Colour**

1. Apply cream or oil to the above region
   Begin just below, inferior, to the target tissue and place a 45mm cup on the center of the Longissimus / Thoraco-lumbar Fascia. Again avoid contact with the Spinous Processes

2. Use ½ Full Pump Stroke or stop at a point of skin raise 3/4 ‘s the way up to the first cup line
   Leave the cup in place and Remove Pump and Monitor the Skin Colour
   **ASK & OBSERVE**

3. Move the cup by sliding it slowly superiorly all the way through the Target tissue and Back down again.
   Apply a zig-zag motion as the cup is moved to activate as many mechano-receptors as possible for improved treatment effectiveness
   Develop a “feel” of sites that offer greater resistance.
   Does this greater resistance correlate to your assessed target tissue?
   If the Resistance within the cup is INSUFFICIENT Increase the level of Vacuum until the first onset of resistance is felt.

Repeat until a MILD pink Colour is produced in the target tissue.
Progression of Treatment:
Place the target tissue in an increased position of tension by creating lateral flexion of the spine in the prone position

1. From the distal end (move both legs such that lateral flexion in the trunk is induced)
   Watch the pelvis closely as you move the legs laterally to induce the trunk lateral flexion. If the pelvis starts to rotate you are moving the legs too far, just move them back slightly such as the pelvis stays horizontally stable ie both PSIS’s stay level

2. From the superior end, rotate head comfortably away and laterally flex the upper Thoracic region

   *If using Vacuum stay within the line of Longissimus. If your target tissue is more lateral for example the Latissimus Dorsi and the non-dense superficial fascia, release the Vacuum and just use the edge of the cup for treatment.*
You could also create an increase of required Flexion, Lateral Flexion and Rotation by an appropriate seated positioning as shown above.

4. Once completing 2 minutes of trial treatment, reassess to verify that you are making positive changes:

   Seated Thoracic Rotation  Left ____° Right ____°
   Seated Lateral Flexion    Left ____  Right ____

If the results are positive, that is painfree range of motion is being restored, then you can continue treatment with a confident certainty that you are satisfying your clinical objectives.

**Observe the following general cautions when using this Myofascial Vacuum Cupping technique in an athletic context.**

Avoid performing any new or unaccustomed technique to an athlete close (within 2 days) of an important athletic activity.

Trail all new processes during training where you can work together to create the suite of techniques.

If using any methods of cupping close to an important event be conservative (Specifically this means applying vacuum such that the tissue is raised only half way up to the 1st guide line. In relation to the time for the tissue to be “exposed” to the vacuum, this also needs to be reduced.

Hamstring ROM Assessment:

Perform a Straight leg Raise: Stop at which ever comes first
S1 is When the athlete FIRST feels the onset of stretch
P1 is When the athlete FIRST feels the onset of pain
OR
The point when you, the therapist, FIRST feels the onset of resistance is called R1. If you however move through this level (R1) by taking up the gentle slack to the next level of resistance is a level we call R1+.

Note the Range of Motion (ROM) Left and Right
Left ____° Right ____°

What is considered optimal Hamstring Range of Motion (ROM) for a person of average flexibility?
80 - 90°

You may want to apply 1, 2 or all 3 of the techniques outlined in this next section to restore optimal ROM if restriction is due to superficial fascial restriction

Please consider the important rules for the application of this technique. Always begin conservatively with both the level of vacuum created and the time you “expose” the tissue to this force.

Technique: Static Myofascial Vacuum Cupping to the Posterior Thigh

1. Apply cream / wax to the appropriate hamstring region and perform Palpatory Assessment to identify Target Tissue

2. Apply Static Cupping in the same method that was used in the initial practical exercise to the Paraspinal muscles & fascia.
That is applying 2 Cups Statically to the Medial & Lateral Hamstrings starting distally

And Working “leap froging” from Distal to Proximal. When you reach the level of the proximal Musculo-tendinous junction stop and repeat the process from the distal start position again

Technique: Sliding Myofascial Vacuum Cupping to the Posterior Thigh
Apply **Sliding Cupping** – Using one cup at a time to target the **tissue you assessed to be hypomobile, for example** Biceps Femoris mid belly (Lateral Line)

Begin with sufficient cream or wax to allow the cup to move freely.

Begin with a conservative skin raise in the cup ie ½ to 2/3 ’s the way up to the 1st line

Apply the cup with the appropriate degree of vacuum and gently slide through the target tissue. Add a little transverse, zig-zag movements to mobilise the tissue as effectively as possible.

If your assessed restrictive, target, tissue was found in the Semi Membranosus & Tendinosis then move the cup in the Medial Line.

If your assessed restrictive, target, tissue was found in the central fascial septa between the Semi Membranosus & Tendinosis medially and the Biceps Femoris laterally then move the cup in the Medial Line. The Central fascial septa line / Neural line.

**Technique: Sliding Through-range Myofascial Vacuum Cupping to the Posterior Thigh**

*Left: Use Vacuum Cupping with “Through Range” passive movement.*

1. Passively Flex the Hamstrings to 90° and apply a single cup to target the **Biceps Femoris** (Lateral “Line”) and Stop at a point of skin raise 1/2 to 3/4 ‘s the way up to the first cup line.

Hold the cup still while you move the limb through-range from Knee Flexion to Extension

Work your way up toward the Proximal Musculo-tendinous junction
2. If your assessed restrictive, target, tissue was found in the Semi Membranosus & Tendinosis, Flex the Hamstrings to 90°, apply a single cup to target the **Semi Membranosus & Tendinosis** (Medial “Line”) , Stop at a point of skin raise 1/2 to 3/4 ‘s the way up to the first cup line. Hold the cup still while you move the limb through-range from Knee Flexion to Extension

Work your way up toward the Proximal Musculo-tendinous junction

![Images of cupping therapy](image1.png)

3. If your assessed restrictive, target, tissue was found in the central fascial septa between the Semi Membranosus & Tendinosis medially and the Biceps Femoris laterally then Flex the Hamstrings to 90°, apply a single cup to target the **Central** (Neural “Line”) and Stop at a point of skin raise 1/2 to 3/4 ‘s the way up to the first cup line. Hold the cup still while you move the limb through-range from Knee Flexion to Extension

Work your way up centrally covering the middle 1/2 to 2/3’s of the muscle.
Stretch the Hamstrings Dynamically and reassess

Take the hip into Flexion first then extend the knee to the point of S1 (1st onset of stretch) Now just oscillate the lower leg just in and just out of S1

Reassess: Straight leg Raise     Left ____° Right ____°

12. Practical Exercise 5: The Use of Vacuum Cupping with “Through Range” movement To the Upper Trapezius and Levator Scapula myofascia.

Assessment: Cervical Lateral Flexion

Left ____° Where restricted_________________ (Palpate to identify target, restricted, tissue)

Right ____° restricted_________________

What is considered optimal Upper Trapezius Range of Motion (ROM) for a person of average flexibility?

Seated Active Lateral Flexion: 35 - 45°
1. Apply cream / wax to the appropriate region and further perform Palpatory Assessment to clearly identify Target Tissue

2. Apply **Sliding Cupping Prone**– Using one cup to target the restricted tissue in the Upper Trapezius and via continuity to the Levator Scapula below it.

Sliding cupping in the Prone position. A small diameter cup is used due to the contour of the Upper Trapezius muscle. If a larger cup is used you may have difficulty keeping the cup sealed
Starting and finishing position using Sliding cupping in the Prone position to the Upper Trapezius Myofascia

Use Vacuum Cupping with “Through Range” passive movement: Seated.

Apply a single cup to target the Upper Trapezius and Stop at a point of skin raise 3/4’s the way up to the first cup line.

Hold the cup still while you guide your patient into through range contra-lateral Cervical Lateral Flexion and Rotation. “Please take your nose toward your armpit”
Repeat applying the cup to a position 2 – 3 cms superior to the Superior angle of the Scapula at the Inferior Musculo-skeletal junction of the Levator Scapula.

You will have greater control of the process and your patient will feel clear about what they are required to do if you support their head as shown and give the following instructions “Please slowly take your nose toward your right armpit. Please stop me if you feel any pain, pinching or the slightest discomfort”

**Reassessment:** Cervical Lateral Flexion.

Left ____°

Right ____°

**Cleaning the Myofascial Vacuum Cupping Equipment.**

It is obviously essential to clean cups after each application to stop the spread of infection.

Cups can be washed by fully immersing them in warm soapy water and rinsing before drying. Simply place them on a towel or on a sheet of paper toweling to dry.

Don’t use any external heating sources such as a hair dryer as you may damage the plastic cups.

Cups can also be wiped after every application with Antibacterial Wipes.

**NB:** Be careful when cleaning that you don’t remove the indicator line markings on the cup as they are an essential guide to the level of vacuum thus the dosage of treatment you are applying.
13. Important points to Self Assess your Competency
To test your competency in relation to your knowledge of the Myofascial Vacuum Cupping
Take this test.

**In relation to the Myofascial Vacuum Cupping Technique can you:**

Describe the aims of the technique

Indicate when you would use the technique

Determine who are the most appropriate patients to use the technique on.

Indicate who are the inappropriate patients for its use

Describe the Contra-Indications
   Absolute and relative

**In relation to the application of the technique can you:**

Describe why is it important to have accurate cup placement

Name the 4 ways to ensure appropriate dosage of the technique, in terms of the accurate monitoring of the tissue changes and to prevent excessive bruising.
PART 3

The Use of Soft Tissue Treatment Tools in Clinical Practice

14. Myofascial mobilisation with smooth-edge tools

To get the changes we want in the target tissue over a short time frame is potentially stressful on the practitioner's body to perform. There is a solution: Myofascial Vacuum Cupping as discussed above OR smooth-edge tools. The tools can:

1. Provide an effective medium to achieve a clinical outcome and
2. Save your fingers, hands, wrists, shoulders and back from physical overload

Myofascial Tension Techniques and Friction Massage are well-described techniques that are effective in mobilising dysfunctional tissue such as excessive collagen deposition after a significant injury. The problem with these techniques is that they are potentially stressful for us to perform. There is a solution, use smooth-edge tools to perform the soft tissue mobilisation.
Description of the technique:

The therapist uses a smooth edge, for example the top edge of a cup used in vacuum cupping or a porcelain saucer (which are easily obtained from Asian grocery shops) as the direct contact point on the skin. It is a replacement for using our thumbs as the "tool" to perform the technique. The great news is that a firm edge will last a lot longer than our thumbs when it comes to applying soft tissue treatment. This technique has been used traditionally for centuries (the first written evidence of its use is found in China which was 700 years ago) Some readers may know the traditional terms of Gua Sha or Spooning. The technique that we are advancing here is, like Myofascial Vacuum Cupping, a more conservative form of these traditional techniques.

Selection of appropriate patients for the technique

As with the use of vacuum cupping, select “robust” and non-irritable patients. Develop a good skill base and a high level of awareness of the critical signs to be monitored first.

Contra-indications for the technique

As with the use of vacuum cupping:

**Absolute:** Skin lesions, skin fragility, varicose veins, myofascial attachment sites to bone

**Relative:** Medications which may increase the risk of bruising e.g., blood thinning medications Vulnerable regions of the body such as: the anterior and lateral cervical region, groin in the neurovascular bundle, medial upper arm, popliteal and cubital fossae.
Remember why we are doing this technique: to mobilise myofascial hypomobility. You would therefore use the same processes of monitoring your treatment with this technique as you would with any other technique for example Friction Massage and / or Myofascial Tension Technique

Cautions
   This technique also has the potential to significantly bruise tissue. Learn to closely watch the tissue and monitor it often to check that you are not over-treating.

Gaining competency in this technique
   Ways to gain greater “feel” and competency when using the technique:

   1. Practice on yourself. Feel and assess the tissue for the exact sites you want to change, and then treat. As you are treating, ask yourself the question, can I still feel the outline of the dysfunctional tissue “through” the tool?
      If not, stop and feel again with the pads of your fingers. Get a good mental image of the shape of the tissue and try using the tool again.

   2. When treating a patient, ask for constant feedback. Explain to the patient the following: “It is important with this technique that you feel more of a sense of stretch than pain. Please tell me if you feel any discomfort at all.”

Specific Guidelines to Successfully Use Smooth-edged tools
Identify restricted tissue by ROM testing and palpation to determine the target tissue.

Apply the technique with tissue under Ideal tension conditions for example Superficial tissue laxity to reach deeper layers or Superficial tissue tension to best target superficial layers.

Choose a “Dosage” level, in terms of depth and length of treatment, in keeping with the Pathology and the Irritability of the patients symptoms

Develop the right “Feel” of correctly engaging the tissue.

Monitor the skin constantly for signs of excessive stress. The first signs of stress will appear as small red dots over the hair follicles. If these appear very quickly you may be too “heavy handed” in your approach. Discontinue at this point and let the skin “recover”.

________________________________________________________________________

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Cautions:
Don’t use too aggressively, if you are using a plastic Vacuum Cup which breaks you certainly could injure your Patient and / or yourself.

Keep clear of Muscle attachment points and bony projections.

Example 1. Treatment of Anterior and / or Lateral Compartment Syndrome of the Lower Leg using a smooth edged tool.

As always, assess & address causative factors for example:
Short and Tight Plantar Flexors causing the anterior compartment to overwork in dorsiflexing the foot against a shortened antagonist.

Dysfunctional motor pattering where the athlete demonstrates Over active Tibialis Anterior & under active Tibialis Posterior and the other deep Plantar Flexors, Flexor Digitorum Longus and Flexor Halluxis Longus

Inappropriate, unsupportive footwear for an unstable foot type eg Excessive Pronation

Palpate to Identify Dysfunctional / Target Tissue:
The Anterior Compartment comprises Tibialis Anterior, Extensor Digitorum Longus and Extensor Hallucis Longus
The Lateral Compartment comprises Peroneus Longus and Brevis

Treatment Aim: To mobilise the Hypomobile fascial tissue
Ankle initially in Neutral
Progress treatment by taking ankle through-range from Dorsi to Plantar Flexion and into Inversion

Now use the porcelain saucer as the tool for direct treatment
Place the tissue in the most appropriate position ie a position of laxity (ankle in dorsi flexion) or toward a position of stretch (ankle more in plantar flexion)

A further progression especially when you want to specifically target the superficial layers is to place the ankle in end range Plantar-Flexion and continue treatment.

Cautions:
Be mindful of excessive compression over the Neural and Vascular vessels. This will not occur if you work within a sensible patient pain tolerance. To avoid excessive stress monitor for obvious neural and vascular symptoms ie Pain, Numbness, Pins & Needles, Coldness in the foot.
Always be mindful of the potential of Deep Vein Thrombosis appearing as pain, discolourisation and/or swelling in the lower leg with no obvious mechanical overload incident. If in doubt refer for clarification

**Clinical Tip**

How can we can best resolve Chronic Exertional Compartment Syndrome with Soft Tissue Therapy, for example, in the Lateral, Anterior or Deep posterior compartments of the lower leg. To give the best chance of success, a vitally important treatment tip is to treat the tissue on a daily basis, even if for only 5 – 10 minutes on each affected compartment. This means teaching your patients to self treat. Athletes are the group usually affected by compartment syndrome and they will willingly self treat if it means having an improved outcome.

We still of course continue to emphasise the need to discover the causative factors of the condition and ensure your management plan addresses those issues.

Myofascial Vacuum Cupping and Smooth Edge Tools are very effective tools in restoring optimal mobility of the associated fascial tissue in the Lateral and Anterior compartments.

It is also important not to completely rest. By continuing to exercise the athlete will be keeping the compartment expanding from the “inside” as the muscle functions during exercise conditions.
Example 2. Treatment to the Tensor Fascia Lata / Ilio-Tibial Band / Vastus Lateralis & Rectus Femoris.

Indications for Treatment.

Haematoma of the Anterior or Lateral Thigh

Your patient may have local pathology here for example hypomobile myofascial tissue from a direct compression injury with a resultant haematoma. Such injury is called a “corked” thigh in Australia, a “charley horse” in Nth America or a “granddaddy or chopper” in the UK.

If the injury was substantial, the myofascial layers can be excessively compressed against the underlying femur with a resultant excessive production of collagen leaving a situation where the mobility of the fascial layers is compromised. This can lead to a loss of range of motion in Knee Flexion and or Hip extension.

Excessive Anterior Tilt of the Pelvis

Another common finding is an excessive anterior tilt of the pelvis due to excessively short anterior myofascial tissue eg Tensor Fascia Lata, Rectus Femoris and the superficial anterior hip fascia.

Palpate to Identify Target Tissue then

Treat the dysfunctional tissue

Smooth edged tools can be very helpful in restoring optimal myofascial mobility in this tissue.

Using the smooth edge of the vacuum cup in the same way you use your braced fingers, thumbs or forearms in applying direct myofascial tension techniques

As a progression of the technique passively take the knee into flexion to increase the tensile load on the Rectus Femoris Myofascia.
Example 3. Treatment to Gastrocnemius and the Soleus myofascia

To de-load the practitioners fingers and still achieve the clinical outcomes you want in these two myofascial structures use the smooth edge of the vacuum cup.

Apply cream as usual, palpate for the target dysfunctional tissue, use the smooth edge of the cup to mobilise and treat the target tissue. The edge can be tilted forward for a stronger more concentrated force or kept level for a more broad contact with the tissue.

Maintain Engagement with the Soft Tissue and move the ankle passively through range from Plantar to Dorsi Flexion
Example 4. Treatment to the Extensor Carpi Radialis Brevis in relation to Lateral elbow pain using a smooth edged vacuum cup or porcelain saucer

To clearly identify for example the right Extensor Carpi Radialis Brevis, flex the elbow to 90° and resist this motion to allow the Brachioradialis to come into clear view. Palpate just lateral to feel the Extensor Carpi Radialis Longus. To ensure you are on ECRL resist radial deviation and extension of the wrist. The muscle will clearly be felt. Now move just lateral to ECRL so that you are in the middle of the extensor group. Flex and extend the 2nd digit to confirm the identification of ECRB. Having discovered the correct muscle treat in an appropriate position, in a lax position, through range and end range positions.
15. Myofascial mobilisation and de-activation of symptomatic points using “T” Bars or “Jacknobber” type treatment tools.

Description of the technique:

There are a number of Treatment Tools available to apply direct pressure or Friction Massage without the usual stress on the practitioners body that can accompany these techniques

Soft Tissue Therapists of all types are very familiar with various presenting soft tissue lesions including

Trigger points,

Areas of focal tenderness and

Sites of significant focal or broad structural thickening within the Myofascial structure.

Clinical Tip

It is important to identify these sites correctly so the right treatment is applied. If you feel a region of focal thickening which in very mobile, that is, it appears to easily move under the skin, it will be most likely situated in the non-dense areola superficial fascial layer. If this is the case DON’T attempt heavy treatment on these sites as there is a high probability it will be a fatty deposit or fatty cyst which will not react positively to any soft tissue treatment.

If the focal thickening is clearly intramuscular, this will be clearly felt as being located on or deeper to the layer of the epimysium. (the easiest way to feel this is to get your patient / client to contract the particular muscle against your resistance. Having done that the outer fascial covering, the epimysium, will be easy to locate). The focal site in question should also
correlate with a soft tissue injury having been sustained. If both these factors exist then the structural thickening may be a result of excessive collagen deposition and will respond positively to direct soft tissue treatment.

**The important guidelines in relation to using T-Bar or “Jacknobber” type Treatment tools are as follows:**

Palpate to clearly identify the target tissue. Get a sense of the depth of the dysfunctional tissue and its width, length and thickness.

Form a cradle to allow the tool to stay directly on the tissue you want it too. It should not be able to move 1mm unless you want it too.

Using the broadest “knob”, apply the tool to the site slowly. Work to the same level you would if you were using your thumbs. For example for Digital Ischemic Pressure / Trigger point Treatment

*“Please stop me when you feel your pain to be around 7 or 8 out of 10 on a pain scale where 0 equals no pain and 10 is the maximum pain you have experienced”*

If in doubt as to the effect on the patient ask them “How does it feel?”. It may surprise you to hear that “It feels good” “Even better and less pokey than your thumbs”

Again if you are not sure on the outcome of the use of the tool then use it conservatively and check in with the patient at a later time to guage their reaction to it.
**Treatment option A**

**Digital Ischemic Pressure / Trigger point Treatment**

Once you are positioned correctly and have the correct degree of pressure on the site, you are able to treat this in exactly the same way you would use if you were using your thumbs.

**Option 1:** Maintain steady pressure at the level of 7 or 8 out of 10 until pain dissipates, typically around 30 secs

**Option 2:** Maintain steady pressure at the level of 7 or 8 out of 10 for shorter periods typically around 10 secs, then release the pressure and reapply to exactly the same site with the same pressure. Repeat this until pain dissipates usually 3 to 4 cycles.

**Option 3:** Maintain steady pressure at the level of 7 or 8 out of 10 and now with precisely controlled overpressure oscillate just in and just out of this level.

To be successful this must be JUST in and out of the level you are working at. This may mean only a 1 or 2% increase and decrease in pressure. Continue until pain dissipates.

**Cautions:** If the pain increases you will stop. If there is no change after the recommended times, leave the site and treat 1cm along the same affected fibre direction and return to original site

**Gently stretch the tissue after treatment.**

Contract / relax type stretching will be most appropriate as you are getting the patient to activate their contractile mechanisms within the structure being treated.

Position the limb such that a gentle stretch is felt in the tissue to be stretched

Ask the patient for a 10% contraction, of their maximum capacity

Resist this isometric contraction for 6 – 8 secs

Ask for relaxation and then

Gently move the body part into a new stretch position.
Treatment option B

Friction Massage. What are the Treatment principles if using the tool for Friction?

1. Treatment must be directed to the right Location (The Target Tissue).
   Verified by Range Of Motion Testing, Resisted contractions and palpation
2. There should be no relative movement of the Tool on the skin during application of the technique.
   If there is movement, friction will occur on the skin and unnecessary irritation will occur.
3. The Friction must work deep enough and be of sufficient “sweep” to impart a friction movement to the lesion and to achieve the required outcome.
4. It is vital to ensure that the region being treated is totally relaxed and the patient is positioned comfortably.
5. It is vital to place sufficient tension on the area being treated.
   If the tissue is too lax then the outcome will not be achieved as insufficient tension exists in the lesion. If the tissue is placed with too much tension then the friction will only target the superficial levels of the lesion.
6. To consolidate the friction massage it is important to actively contract and stretch the associated tissue post treatment.
   Contractions: Active non-weight bearing contractions of the treated area will be sufficient, 5 - 10 reps, to help disperse fluid and begin the process of correct remodelling of the scar tissue.
   Stretching: Contract / relax and Dynamic stretching (30 secs at 5 - 10% overpressure at R1+) of the agonist tissue are the most effective techniques to use.
7. Ice can be applied to the region post treatment in a position of pain free stretch (5-10 mins) to reduce post treatment tenderness or pain. Especially after the initial 1 to 2 treatment sessions.
8. The Friction should initially be applied conservatively, at a level within a safe but therapeutic range, that is, find the level of treatment where pain is first felt then reduce pressure by only a few percentage such that NO pain is felt to assess patients reaction to the treatment.
9. If you desire to work more deeply, to remobilise a particularly thickened lesion, do so over a series of treatments.
   Be aware that after 1 - 2 minutes of treatment a local analgesic effect will occur. This may therefore mask the true level of pain. In this case be careful not to increase pressure too quickly as an adverse reaction may occur.
Contra-Indications to the Technique

**Absolute Contra-Indications:** Where excessive pain is noted on palpation
Directly over Varicose veins.
Skin fragility
Any injury in the Acute Inflammatory phase
Where calcific deposits exist in Soft Tissue (Verified by Plain X-Ray or Diagnostic Ultrasound and by palpation – characteristic feel of rigidity)
If the patient has taken strong analgesic medication (Could obviously mask the true level of pain.

**Relative Contra-Indications:** Always treat conservatively with a patient who uses blood thinning or Anticoagulant medication (Warfarin or Heparin) or has been a Long term user of steroidal medications as their soft tissue may be more prone to injury and bruising.
If the patient generally bruises easily (simply ask them).
16. Myofascial mobilisation and de-activation of symptomatic points using Spikey balls as a Treatment tool.

Description of the technique:

Having two 8.5 cms or 3 1/2 inch diameter firm spikey balls in your practice is a great addition to your range of treatment tools.

They have a range of uses:
Allows you to quickly check to see if a particular tissue is implicated in a presenting condition.
Will allow you to effectively treat a large patient without over stressing your body
Will help your patients to self-treat.

Examples of presenting conditions

A. Posterior Hip Shortness

Assessment

Expected Passive Range of Motion of Hip Internal Rotation with the Hip & Knee in 90° flexion is 30°

Main myofascial structure being tested: External Hip Rotators such as Piriformis, Obturators, Gemelli and Quadratus Femoris

The Tested range is 15°

Expected Passive Range of Motion of Hip External Rotation is 40°

Internal Hip Rotators

The Tested range is 30°

B. Posterior Hip Pain

Assessment

A thorough palpatory examination can be performed to the posterior hip to determine if sites can be found which, on palpation, reproduce the exact presenting pain.

C. Hamstring Pain or Chronic tightness.
Case study: An athlete presents with hip flexion restriction which they say is due to hamstring shortness BUT they have been treated extensively on their hamstrings by other therapists with limited results.

Assessment

Expected Passive Range of Motion of Hip Flexion is 90°

The Tested range is 75°

Main myofascial structure being tested are the Hamstrings

You want to see quickly whether treating the hips is a good use of your time in positively changing the state of the hamstrings. The spiky balls can be used on the hips for 2 minutes and then you can retest.

If you make a significant positive change on the Hamstring Passive Range Of Motion (PROM) by treating the hips you have greater confidence to incorporate treatment of this region into your management plan.

Placement of the Balls in the Hip region

Useful placement sites
Between the sacrum and the greater trochanter to the Hip external rotators

Along the joint line of the Sacroiliac joint particularly between the Sacrum and the PSIS

Below the Iliac crest

Laterally in the Gluteus Medius and Minimus soft tissue
Demonstrate to patient what you would like them to do

Get into a “Bridge” position.

Place the balls between the sacrum and the greater trochanter to the Hip external rotators

Lower your posterior hips onto the balls

Allow one of your hips to abduct, placing more specific load on to the left posterior hip.

Feel free to explore the hip by moving around on the ball to find some of the key points of tightness and / or pain

Now place the patient down on the balls

Allow one leg at a time to abduct
Reassess the SLR. If the range of motion has significantly improved then you will know that it is important to include the posterior hip into your treatment plan.

You could perform exactly the same protocol for a patient with Low back pain or Sarco-iliac joint pain, that is,

1. Assess available pain free range, for example standing trunk flexion
2. Treat the posterior hip for 1 or 2 minutes with the spikey balls, to each side as has been shown above and
3. Reassess.

If significant reduction of pain has been noted then you will know that it is important to include the posterior hip into your treatment plan. The patient also knows that they could obtain significant benefits by self treating at home with the spiky balls.
In Conclusion

I sincerely hope that the information and advice contained in this book will help you to enjoy a long, effective, pain-free, and rewarding career.

Very few professions can offer such a potentially high level of work satisfaction as Massage Therapy can.

Good luck, good health, and I wish you all the very best of success in this fantastic profession.

Robert Granter
Melbourne Australia

Feedback

Your feedback, suggestions, and comments about this book will help us make future editions even more valuable to practitioners.

Please send your feedback to info@softtissuetherapyonline.com

Continuing your learning

Visit our website at www.softtissuetherapyonline.com for more information about other products, services, and free resources to support you as a successful therapist.

The DVD “Vacuum Cupping for Myofascial Mobilisation in Clinical Practice” is available from the website and is a great additional resource to ensure your competency in the use of this fantastic technique.
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