



Units included:

HLTMSG001 Develop Massage practice

HLTMSG002 Assess client massage needs

HLTMSG004 Provide Massage treatments

What is Massage

Massage is one of the oldest forms of healing. Given correctly it can be sedating or invigorating. Massage can also help with headaches, muscle pains, tension and stress.

Relaxation Massage is the basis of many other massage modalities. Some other massage techniques that are taught within the Certificate IV/ Diploma of Remedial Massage Course are:

• **SPORTS MASSAGE**

Sports massage includes stimulating massage to prepare competitors for active sports, light massage to help with recovery, and specific strokes for training and maintenance. A massage therapist will have a thorough understanding of anatomy and physiology as well as knowledge of first aid suitable for sports injuries.

• **SUPERFICIAL LYMPH MASSAGE**

This is a specialised massage aimed specifically at the lymphatic system. Face and body techniques are used. It is especially useful for people with acne, infections and oedema.

• **PRESSURE POINT MASSAGE**

Shiatsu (Japanese) and Acupressure (Chinese) are pressure point massages. These are massages that concentrate on special points on the body to alter the energy flow within that body.

• **REMEDIAL MASSAGE**

Remedial massage is used to bring about a remedy. This massage is helpful for people with injuries and pain. Work cover or medical practitioners often refer clients to massage therapists. One of the main differences between a therapeutic massage and remedial massage is that the remedial therapist employs a number of assessment techniques to ascertain the source of pain and dysfunction.

Posture

Posture of therapist is important, follow the following simple steps to ensure you have a long and successful career in the industry.

- Feet comfortably apart
- Bend from knees and hips
- Spine aligned
- "T" stance, Tai Chi style
- "Horse" stance
- Move feet as required
- Stand close to table
- Face the client

Contra-indications to Massage

A contra-indication is used to describe a condition that prevents a body massage being performed.

In the case of a local contra-indication, only a particular area is left out. For example, if the client had a sprained ankle it would not be massaged but a massage can be given to other areas.

In the case of a general contra-indication, the client cannot be massaged at all. The general rule is "*If in doubt, leave it out.*"

• **LOCAL CONTRA-INDICATIONS**

1. Varicose veins
2. Tumours or unrecognisable lumps (be wary of moles)
3. Pregnancy - post natal period (leave out abdomen)
4. Fractures and sprains
5. Bites, cuts, stings, bruises
6. Recent scar tissue
7. Recent sunburn
8. Hernia
9. Diarrhoea
10. Inflammation

• **GENERAL CONTRA-INDICATIONS**

1. Unstabilised blood pressure
2. Swelling from an allergic response
3. Infectious skin disease
4. Raised temperature
5. Shock, hypothermia
6. Hyperthermia
7. If the client has an acute (sudden) medical condition, refer them to a doctor for diagnosis and advice before you proceed with the massage.

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Area of concern	Anatomy	Notes
Temporal and forehead	Temporal artery- lateral sides of cranium Temporal branches of facial nerve Ophthalmic branch of trigeminal nerve	
Temporomandibular joint (TMJ) submandibular areas	-parotid gland on ramus of mandible on top of masseter -facial nerve anterior and superior to parotid gland -facial artery inferior to parotid gland -styloid process of temporal bone posterior to mandible, anterior to mastoid process	-styloid process may break with excessive pressure -opening the jaw exposes nerves more -compressing or damaging the nerves can cause trigeminal neuralgia
Anterior triangle of Neck	-SCM, mandible, trachea -carotid artery -internal jugular vein -trachea -thyroid -hyoid bone -submandibular salivary glands	-pressure on carotid can slow heart rate or cut off blood supply to head causing dizziness or black out -vaso-vagul reactions
Posterior Triangle of Neck	-SCM, clavicle, trapezius -external jugular vein -brachial plexus -subclavian artery and vein	-pressure on brachial plexus can cause pain down arm and hand
Occipital area	-occipital foramina -greater occipital nerve (C2) -suboccipital nerve (C1)	Digging too deep in the occipital area with the head in passive extension, can entrap the nerves there. Static pressure with caution is ok.
Delto-pectoral triangle	-inferior fibers of anterior deltoid, clavicle, and superior fibers of the clavicular head of the Pec Major -cephalic vein -brachial plexus -axillary artery and vein	
Axillary region	-anterior border: deltoid, biceps and Pec Major -posterior border: deltoid, triceps, latissimus -Axillary nerve, artery, vein, lymph nodes -cephalic vein -brachial plexus -median nerve -brachial artery	There are many very effective techniques for working the muscles of the pecs, subscapularis, through the armpit. Know what you are doing before proceeding.
Brachial region	-superior border: inferior aspect of the biceps inferior border: superior aspect of the triceps -Median nerve -Brachial Artery -Basilic, brachial and cephalic veins -radial nerve	Basilic Vein can be trapped medial to the humerus between the biceps and triceps. Cephalic Vein can be pinned to the humerus just lateral to the biceps
Antecubital fossa-	-distal to biceps brachii	Caution when using Cross fiber friction on

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anterior elbow	-border: lateral common extensor tendon, medial-common flexor tendon -median and radial nerve -basilic vein -brachial artery	the insertions of the biceps and brachialis in the shortened position as it may entrap the median nerve
Cubital notch-posterior elbow	-posterior to medial epicondyle, anterior to olecranon -ulnar nerve	"Funny bone" cross fiber work on the triceps insertion requires a lengthened position to protect ulnar nerve
Anterior surface of distal forearm and wrist	-radial nerve and artery -median nerve -ulnar nerve and artery	
Xiphoid process	-xiphoid process	-heavy direct pressure could break off bone
Abdominal Region	-Liver, spleen, stomach, gall bladder, reproductive organs, intestines, colon -abdominal aorta, vena cava -vagus nerve	Visceral manipulation is an advanced technique that can be learned. Deep pressure on the psoas may over stimulate the vagus nerve and cause symptoms such as sweating, nausea
Femoral Triangle	-Sartorius, Inguinal ligament, adductor longus -femoral nerve, artery and vein -inguinal lymph nodes -great saphenous vein	-area prone to herniation -avoid pulse when palpating psoas tendon
Gluteal region	-between sacrum and greater trochanter -Sciatic nerve	When working the piriformis watch for referred pain
Posterior Knee	-tibial and peroneal nerve (split off from sciatic nerve) -Popliteal artery and vein	

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Pathology			
Condition	Symptoms	Possible consequences	Acceptable Interaction
Inflammatory Conditions	-heat, redness, swelling, pain -sprains, strains, bursitis, synovitis, tenosynovitis, arthritis	could aggravate and worsen condition	RICE, Sub-acute- general massage above area chronic inflammation- direct massage may be ok.
Varicose Veins	-veins that are enlarged and twisted due to damaged valves -can be painful	-direct pressure can cause further damage -deep draining strokes below varicosity is not advised as it may put more pressure on the valve	-spider veins ok -work around vein or move it out of the way -nutritional supplementation with Vit C and bioflavonoids recommended
blood Clots	-inflammation of vein -warmth, redness, -found in elderly or after trauma -may be discolored (reddish cyanotic hue)	-massage could dislodge and move clot possibly causing a heart attack or stroke	Wait for medical clearance; blood thinner medications may be necessary
Cardiac conditions	-severe high blood pressure that is unstable -arteriosclerosis	-heart/body may not tolerate increase in circulation	-work only when medicated or controlled by diet and stress reduction methods
Hemophilia	- inability of the blood to coagulate -abnormal tendency to bleed -may cause swelling in joints	-usually medicated with cumaden or other blood thinners -deep pressure may bruise or cause tissue damage	-light pressure until you find out what the client can tolerate
Diabetes	-advanced cases: loss of feeling and circulation in extremities -pitted edema: pressing into tissue leaving indentation that stays	may cause tissue damage	-circulatory strokes may still be beneficial: proceed with caution
Pregnancy	-reduced circulation in legs -possible blood clots due to hormonal changes	-miscarriage	Use Common Sense Work with physician or midwife.
Local or systemic infections	-fever -inflamed lymph nodes -some examples: chicken pox, measles, influenza, scarlet fever, nephritis, hepatitis	-massage may be too stressful on the body and the immune system	-energy work -physicians approval needed
Infectious Skin Diseases	-bacterial infections (staph, impetigo, tuberculosis) -viral infections (herpes simplex and zoster, warts, chicken pox, -parasites (scabies, fleas, lice, ticks) -Fungal Infections (athletes foot, ringworm, yeast infections)	-may spread disease to yourself and other clients	-physician approval

What is Relaxation?

Relaxation is the natural process of returning to a quiet body and a calm mind. This physical and mental unwinding is termed the relaxation response and it counteracts the stress response.

People who normally live with a high degree of tension are more likely to experience problems when any extra stress occurs. These people can lower their general level of tension by regular relaxation practice and so cushion themselves against overstress. By doing this, more hassles can be tolerated without causing physical and emotional problems.

- **WHAT IS A RELAXATION RESPONSE?**

A relaxation response is a state of calming after a state of arousal. The body comes back to a state of equilibrium and ease after being stressed. This return to stability is essential for maintaining health and well-being.

- **WHAT BODILY CHANGES OCCUR DURING THIS RESPONSE?**

- Mind becomes tranquil
- Hormone production decreases
- Breathing rate decreases as less oxygen is needed
- Heart rate decreases and blood pressure drops
- Digestion is regular
- Sweating decreases markedly
- Muscles relax

What is Stress?

Stress is a demand or pressure that is experienced as a burden or a difficulty. This demand or pressure is often called the *stressor*. Writing exams, being ticked off by the boss, meeting deadlines, death in the family, getting married/divorced, changing jobs or moving house are examples of situations that many people find stressful.

Certain bodily changes occur when people respond to these demands and these changes form the 'stress response'.

- **WHAT IS THE STRESS RESPONSE?**

It is a state of arousal consisting of a number of body changes that give the feeling of being stressed. When balanced it gives the energy for tackling the stressful situation.

In its extreme form, the stress reaction is known as the 'fight or flight' response. It occurs often as a chronic response and eventually it is not consciously noticed.

WHAT BODILY CHANGES OCCUR DURING THIS RESPONSE?

The brain becomes aware of danger as a result of messages received from the senses.

Mind becomes alert

Hormones are released & the nervous system sends signals to various parts of body to produce the changes shown on diagram.

Less saliva – dry mouth

Blood clotting ability increases, preparing for possible injury.

Breathing rate speeds up. Nostrils and air passages in lungs open wider to get air more quickly

Heart beat speeds up.
Blood pressure rises.

Digestion slows

Blood is diverted to the muscles
subject pales in fright.

Liver releases sugar to provide quick energy

Muscles tense, ready for action.

Sphincter muscles contract to close openings of bowel and bladder

Immune responses decrease - useful in short term to allow massive response to immediate threat - harmful over long period

Effects and Benefits of Massage

The main immediate influence of massage is in effecting a redistribution of fluids in the vascular and lymphatic channels.

BLOOD	Stimulates circulation Enhances nutrition and waste collection to the area being massaged
LYMPH	Helps flow of lymph fluid Enhances waste collection and reabsorption of fluids
MUSCLE	Relaxes contracted muscles Relieves tension Promotes flexibility and suppleness Helps break down adhesions
BONE	Enhances blood and lymph flow to the area
JOINTS	Contributes to the flexibility and mobility of joints
SKIN	Keeps skin supple Reduces adhesions Assists exfoliation
NERVOUS SYSTEM	Exerts a beneficial and soothing influence Aids in promoting the relaxation response

Psychological benefits of caring, nurturing aspect of touch

Improved sleep

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Preparation of massage client

- **DRAPING**

The use of towels and other table or body coverings in a massage is very important. Towels don't just cover the person being massaged; they also:

Act as a comfort factor for privacy

Give warmth

Provide a barrier to the therapist

Protect clothing and equipment

Can be used as bolsters, cushions etc.

Be careful with towel positioning so as to avoid bunching and having to keep attending to the towels instead of keeping the flow of the massage.

- **THE MESSAGE ENVIRONMENT AND EQUIPMENT**

It is imperative to be properly set up for a massage *prior* to commencing the treatment.

Extra towels

Oils

Bolsters

Water

Lighting

Music

Heating/Cooling

Seats

At all times it is vital to act and communicate in a professional manner with regard to:

- the client's welfare, comfort, privacy and respect
- onus of consent, ethics
- therapist's responsibilities and capabilities
- records
- when to refer a client on
- hygiene
- Occupational Health & Safety and legislation
- boundaries (personal and physical)
- full communication of treatment
- implied or inferred inappropriate client behaviour
- difficult clients
- uncomfortable situations.

Oils, Lotions, Creams & Base Mediums

	Advantages	Disadvantages
Vegetable Oils: <i>Safflower</i> <i>Sunflower</i> <i>Canola, olive, soya</i>	Easy to obtain and affordable Good for the skin and suitable as essential oil carrier. Look for cold pressed variety	Difficult to wash out of linen, a residue can build up and turn rancid Limited shelf life. Store in a dark bottle.
Nut & Seed Kernel: <i>Almond, Apricot</i> <i>Avocado, Sesame</i>	Same qualities as vegetable oils, but finer and slightly better quality Makes excellent facial massage oil	Also becomes rancid but not as much as vegetable oil Slightly more expensive
Coconut oil	Cooling properties which are useful in hot in hot Good for excema	Solidify in cooler temps. Strong smell. Doesn't combine well with essential oils.
Wheatgerm oil <i>(vitamin E)</i>	Excellent for scar tissue and helping skin to heal oxidant and nourishing	Too expensive to use all over
Mineral oil: <i>Paraffin, Baby oil</i> <i>QV oil</i>	Washes out of linen totally and doesn't stain clothing Can be useful if allergic to organic products or nuts	Petrochemical product Not absorbed and can create dryness with long term use. Leaches minerals. Not suited to use with essential oils.
Talcum powder	Good for sweaty feet and people who don't like oil	Messy Cheaper products can contain aluminum.
Lanolin	Very moisturizing	Greasy. Some people can be allergic. Use to contain traces of DDT
Moisturizer (Sorbeline)	Very moisturizing. Good for deeper remedial mas work.	Soaks in very quickly. Needs to be combined with an oil for a relaxation massage

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As a therapist it is essential that you maintain your own physical and emotional well being. The following are important factors in ensuring you are fit for massaging.

- **During the massage**

- Wear natural fibres.
- Drink plenty of water.
- Ensure that the room is warm and well ventilated.
- Breathe well.
- Take care of your posture. Have the equipment set to your specifications.
- Be grounded - feel your feet on the floor.
- Vary your strokes, approach each massage a-new.
- Wash your hands before and after every massage.

Make your own resolutions

- **General physical care**

- Have massages: practice what you preach.
- Stay healthy: exercise, eat well, sleep well.
- Take holidays.
- Be clear of your boundaries: know your stamina; decide when you are available and what is acceptable and what is not; decide how many massages you can give in a day; have adequate breaks.
- Have some control over the environment you work in so it suits your needs.
- Cancel appointments when you are unwell.
- Stretch: do yoga or tai chi; swim; meditate; walk in Nature; smile!

Make your own resolutions

- **Emotional care**

- Have contact with a colleague to debrief.
- Use crystals, aromatherapy oils, Bach flower remedies, affirmations, visualisations or whatever works for you.
- Continue your own education.
- Healer heal thyself. Deal with issue in your life but not those of the clients'.

Make your own resolutions

Massage Assessment

A treatment depends on the condition or ailment and application of massage received. First time appointment clients should wear lightweight, loose fitting clothing for an assessment to be performed. This shouldn't take more than 5-10 min. For the treatment a towel is ALWAYS used and securely draped for the massage. This is not only for the comfort of the client but rather respect for the Therapists' work ethics. An assessment will be taken and a case history form will be filled out, this is only coinciding with the severity of the case.

Massage Assessment steps

- Client Interview Overview
- Client Intake, health history (see forms section)
- Interview Questions
- Visual assessment
- Range of motion assessment
- Clinical Reasoning
- Ergonomics
- Posture analysis, gravity, proprioception

The Massage Client Interview is one of the most important parts of the massage session.

The Interview is how you gather information on what the client expects from their session as well as what they need. It will help you create a plan of action in applying what you know about massage and help you to perform an effective massage. It is the beginning of educating your clients about massage and what it is that it does and what you do specifically with massage.

Here are some things to remember when talking with clients:

- be sensitive to the personal information you will be getting from each client
- be aware of the non-verbal factors such as posture, gait and holding patterns of the body.. Be aware of your own body language too.
- learn to communicate just what it is that you do in a massage or what happens when different massage is applied to the body in different ways and explain what is best for their condition
- allow enough time to complete a thorough interview. You can also ask questions as you are working
- use active listening and show that you understand the client by para-phrasing or telling them what you heard them say
- ask yes or no questions and also open ended questions.
- most of the healing process happens in just being heard and acknowledged.

Create an intake form to make the process easier asking the questions you want to ask there first. Expand on them in the verbal interview.

Just asking the standard questions to rule out contraindications is really just the beginning of a good massage client interview. Engaging clients in their own healing process and becoming aware of their bodies is crucial for helping people to feel better and to also build your massage business.

What most people need no matter what they are suffering from or dealing with is to be listened too and believed. Just the act of listening can give people such a sense of relief and start the healing process. It doesn't really matter what technique you use in your massage session.

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Learning to listen is often a difficult challenge for massage therapists. It is also about asking the right questions of clients to get them to open up about their real issues. This isn't psychotherapy but getting people to become more aware of their bodies.

Most massage therapists are taught to ask questions so that they will understand the clients condition better and know how to use their techniques on a client. This assumes that knowing about the condition will help find a solution or fix the problem. Most often issues do not have just one pat answer. When you change the goal of asking questions to one of empowering clients rather than fixing them the massage client interview will look quite different. It puts healing back in the hands of the massage client and focusing on what the client wants to have in their life rather than focusing on the problem. Empowering clients help clients discover their own powers of healing and helps guide them out of the victim mode that so often goes along with injuries and illness.

Asking questions usually shows more about the person asking the question and their views and values. Being able to set your views and agendas aside will be the constant challenge for massage therapists especially since they are often taught to fix in massage schools.

Using open ended questions can help. These are questions that open up a clients perspective. They can't be answered with just yes or no. Once the question is asked active listening is used to repeat the information back to the client so that clarification can be made.

Being able to communicate with clients in this way requires that massage therapists be able to set aside their own views and really listen to the client. This process can be made easier when the massage therapist engages in supervision to work in getting their own needs met outside of the massage office. In doing so, it allows the massage therapist to be more fully focused on the massage client rather than on their own need to fix. Supervision can also help massage therapists become more aware of their own fixing and helping issues which will lead to a higher level of integrity in a massage business which often is what will also create a more profitable and successful massage business.

History taking and recording

Follow a sequence. Your understanding and knowledge will develop and then later you will find that you can vary/adapt or play with the order.

Subjective then Objective examination is the process to follow for you to be able to choose the appropriate treatment techniques/modalities for that particular patient.

This is just a simple overview of SOAP charting. In order to bill insurance companies you will need to be proficient in charting and also writing reports to insurance companies and doctors.

Subjective: The client's subjective complaints and symptoms that are in the clients own words or may have been discussed by the prescribing physician. This includes all the things the client tells you about how they are feeling, past history, present symptoms, limitations in their lives due to the injury, what makes them feel better or worse, and details about the initial onset of the problem or injury. It is often helpful to ask the client to rate their pain or discomfort on a level 1-10 with 10 being the worst. If you do this each time, you will be able to see improvements or setbacks.

Ask specific questions as to the location, intensity, duration and frequency of the pain or discomfort. Have the client point to the specific area on their body or body chart. Ask how painful is it? How long have they had it? Hours? Weeks? Months? Longer? Has it been worse or better? What makes it worse or better? How often do they get it? Every day? Once a week?

Asking specific questions will lead to a clearer picture of the problem/injury you are treating.

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Objective: This is the observations of the practitioner and what techniques were done during the session. This includes visual observations and what you feel in the body of the client. Include things you observe about the clients posture, patterns, movement, weakness, level of tension in the tissues, spasms in muscles, joint movement, color/temperature of skin and breathing patterns.

You can also test the range of motion in different areas and keep track of their improvement or changing patterns.

Some common findings are defined below:

Hypertonicity: involuntarily tight or contracted muscle; excess muscle tone; the tension of the resting muscle is unusually high.

Spasm: involuntary contraction of a muscle as a protective response to an injury or trauma.

Trigger point: specific point that refers pain

Adhesion/scar tissue: the resulting tissue from the wound healing process causing a restriction in resiliency of the tissue

Assessment: As most bodyworkers or massage therapists are not allowed to diagnose conditions, this is to report the immediate results of the session. At the end of the session reanalyze the posture and range of motion. Make notes on any changes in symptoms. Indicate how much change happened- mild, moderate or significant change. Use as many descriptive words as possible.

Most insurance companies will take this information into consideration when paying for the treatment. This is what is telling them if the client is getting better and is the treatment worth it.

Plan: Suggest a treatment frequency and things that need to be addressed in the future. Include any self care instructions you gave to the client, special requests by the client, or reminders for the next session.

Objective Assessment -

An assessment could consist of one or several of the following:

Range of Motion

Palpation

Plumb line-Postural abnormalities/Gait

Orthopedic Testing

Sensory/Dermatomes

Motor/Reflex testing

Forces, responses and endfeels

Pain and its Attributes

Nerve innervations are essential knowledge when dealing with muscles that is why these tests are imperative. It enables you to determine where the pain initiated and at what level of the spinal column. (Also; impingement, disc herniation or prolapsed)

After treatment a remedial exercise is given pertaining to observations and assessments.

This involves movements to perhaps mobilize strengthen, and/or stretch.

These exercises may be given to isolate a specific muscle or compensating muscles to affected areas.

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Range of Motion

After a massage treatment, sometimes the Therapist will work with a specific muscle or compensating group, to help the specific ailment that was treated (by stretching /range of motion). A home remedial exercise is often given to the client pertaining to observations and assessments in the case history. This will help the client perform actively, on their own, regain mobility by strengthening and stretching.

Active, Passive and Resisted range of motions are performed by the Therapist and the client. This will help determine strength, weakness or obstructions, involving pain, in order to help in the designated treatment plan.

Isometric and isotonic contractions may be performed as well to help in isolating the muscle.

Palpation

The Therapist observes certain anatomical structures, bony landmarks, misalignments or abnormal lumps. It is also important for the Therapist to have knowledge of any sensitive areas, (i.e., ulnar nerve next to the medial epicondyle of the humerus; peroneal nerve close to the head of the fibula). (There's nothing worse than that therapist running over one's "funny bone")

Plumbline/Postural Abnormalities Gait

This is when the Therapist observes the body's mechanics and the effects of the force of gravity. A plumbline assessment is simply presenting the body in vertical planes.

Note is taken of any postural deformities or deviations that could be present (muscular or structural).

While the client is standing, a fixed point is set to the vertical position and an anterior, lateral and posterior view are observed, (i.e.: head, clavicles, ribs, waist, elbows hips, knees and ankles).

GAIT

One's gait is extremely important. Quite often any pain is not recognized or discomfort experienced, and could be a result from the way one walks. The Therapist should observe the way the shoes are worn; (and whether the client is excessively inverting or everting).

We have a gait cycle, 60% is stance phase and 40% is the swing phase.

We break it down into the different components (deceleration, midswing, acceleration, pushoff, midstance, footflat, and heelstrike).

Throughout the components, observations are made at which muscles are concentrically and eccentrically contracting, and at which stage. Several problems can be determined through this assessment that contribute to the pain, involving lowback, hip, foot and knee problems.

Orthopedic Testing

Quite often, clients question the fact of the pain being experienced. Is it simply muscle soreness from an overuse injury, or could there actually be a serious neurological problem? (i.e., disc, ligament, or nerve impingement, etc.). This is why orthopedic testing is so important and takes only a few minutes out of the treatment plan.

While the Therapist instructs and assists the client, certain tests can be performed to determine the cause. Results in finding a positive test can explain why one may be feeling a certain ache or discomfort. This in turn will locate the precise problematic area. i.e., Sciatic---positive Straight Leg Raise

Meniscal Tear--positive McMurrays
Tendonitis for long head of biceps-Speed's Test

Sensory/Dermatomal testing

The Therapist performs touch and scratch tests, to find tenderness related to it's nerve root distribution off of the spinal column.

A dermatome is an area of skin that is supplied with it's own nerve fibers.

A myotome is a group of muscles innervated from a single spinal nerve root, i.e., C5 anterior arm / forearm

L3 medial/anterior thigh

Motor Reflex Testing

A nerve off of the spinal column innervates every muscle in the body. When a limb moves, a muscle is flexed. Any type of movement, is the result of the brain sending messages to the spinal column, telling the muscles to move. It is at each specific level of the vertebral column that the nerves come off and enable the muscle to move.

For example the quadriceps muscle, it's muscular nerve innervations are L2, L3 and L4. Its action is to extend the knee and flex the hip. If a client is suffering from any type of paralysis in this muscle, the Therapist knows where its blood and "motor" supply come from at that specific level of the vertebral column.

This is why motor tests are imperative. It enables the Therapist to determine where the pain is initiated and at what level of the spinal column (also; impingement, disc herniation or prolapse).

The therapist resists an action performed actively by the client. Specific muscle movements are involved when these tests are performed, this ensures that the muscle is receiving the message from the brain-spinal column. i.e.;

C5 resisted abduction (deltoid)

C6 resisted flexion (biceps) / resisted wrist extension (extensor digitorum longus)

C7 resisted wrist flexion (palmaris longus)

C8 resisted finger flexion (flexor digitorum superficialis)

L4 resisted dorsiflexion (tibialis anterior)

T1 resisted finger abduction/adduction (interossei)

S1 resisted eversion (peroneus longus)

Deep Tendon Reflex

This is a reflex action or movement of the client when the Therapist slightly taps the specific tendon. This will test the nerve supply of specific roots off of the spinal column, making sure the message is sent to the spinal cord and being relayed back to the muscle. i.e.,

C5 biceps tendon

C6 brachioradialis tendon

C7 triceps tendon

L4 patellar tendon

S1 Achilles tendon

Forces, Responses And Endfeels

When the client performs different movements there are different controlled forces that stretch, bend and twist, such as bone, nerve, ligament, or muscle.

It is important for the Therapist to observe a variety of things upon the movement of the client such as: the amount of effort, location, direction, frequency and speed of application.

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When the Therapist performs range of motion (passive) towards the end of the range, there will be some resistance. This is called an "end-feel". There are normal and abnormal end-feels. i.e., bone-to-bone, soft tissue approximation and tissue stretch

Spasm, empty, capsular, springy and boggy are End feels felt by the Therapists and observed in the assessment to differentiation between sprains, strains, torn menisci and simply "loose joints".

Pain and its attributes

It is essential for the Therapist to acknowledge and take note of the client's pain. Several questions are asked and occasionally to be described in more detail on the case history form. The reasoning for this is it will enable the Therapist to determine the origin.

When does the pain occur?

What type of pain is experienced (local or referring)?

What is the level of intensity?

What aggravates / relieves the pain?

Are there any other symptoms associated with the pain?

Are you receiving any treatment now (medication)?

Pain can result from pathology of muscle, joint, ligament, bone, nerve or viscera.

There can be many onsets either insidious or sudden.

i.e.; joint clicking, decreased range of motion, weakness, aggravations and joint crepitus.

Basic Massage Movements and their Benefits

(A) EFFLEURAGE

Long flowing superficial strokes, used to begin and finish a massage.
Pressure is light

Benefits of Effleurage

- Accustoms the person to the feel of your hands
- Used to link other movements
- Has a sedative, relaxing effect
- Assists lymphatic circulation
- Soothes pain
- Stimulates sensory nerve endings
- Warming to skin and superficial layers

(B) PETRISSAGE

Compression movements: kneading, knuckling, rolling, squeezing.
Direction is usually across muscle fibres

Benefits of Petrissage

- Increases circulation to local area
- Warming
- Relaxes muscle spasm and contractions

(C) DEEP PRESSURE

Slow deep movements using thumbs, elbows, knuckles, palms, fingers.
Can use hands singly or together

Benefits of Deep Pressure

- Helps to soften and lengthen muscle fibres
- Aids in stretching muscle fibres
- Helps to separate tight muscle fibres

(D) PERCUSSION

Light fast rhythmical movements including hacking, cupping, pounding.
Direction is usually across the muscle fibre

Benefits of Percussion

- Stimulates local circulation
- Creates a vibration which can release tension
- Is beneficial for ticklish areas

Tight Spots

Tight spots are muscle contractions, often of a chronic nature, that become habitual. Massage can be very helpful in alleviating the discomfort and restriction of tight spots. Acute muscular contraction (cramps) are often best dealt with by heat and stretching.

Describe what a tight spot feels like within a muscle whilst giving a massage:

Possible causes:

- Muscular tension caused by stress, insomnia, anxiety.
- Muscular fatigue and dehydration after exercise.
- Inefficient posture over a long period of time.
- Overuse or misuse by either the dormant side or the repetitive movement.
- Scar tissue.
- Infection.
- Pain/headache.
- Incorrect breathing.

- **Massage for tight spots**

The aim of massage over tight areas is to increase circulation, loosen muscle contraction and promote relaxation.

The following principles can be adapted to any part of the body.

1. Promote warmth by brisk friction.
2. General circles over the area with thumbs or fingers.
3. Deeper strokes along the muscle fibres to promote lengthening.
4. Deeper strokes across the fibres to reduce adhesions.
5. Press-release on the area to promote circulation.

The Massage Strokes

BACK AND BUTTOCKS MASSAGE

- Make contact and pause
- Define the area to be massaged
- Tuck towel into clothing or underwear
- Apply oil

1. ***Effleurage*** Rowing stroke
 Pulling stroke
2. ***Petrissage*** Kneading stroke
3. ***Deep Pressure*** Arcs on buttocks with heel of hand
4. ***Sacrum*** Light effleurage circles
5. ***Deep Pressure*** Along muscles beside spine towards the heart
 Across top of the shoulders
6. ***Effleurage*** Rowing stroke

- Cover your client with towel (wipe oil off if client wishes)
- Break contact slowly or glide onto the next area

BACK OF LEGS

- Make contact and pause
- Define the area to be massaged
- Tuck towel into clothing or underwear
- Apply oil

1. ***Effleurage*** Rowing stroke over entire leg
 V pumping
2. ***Thigh*** Kneading
 Deep pressure
3. ***Knee*** Light circles behind the knee
4. ***Calf*** Kneading
 Deep pressure
5. ***Ankle*** Circles beside Achilles tendon
6. ***Foot*** Squeeze heel and sole of foot
7. ***Effleurage*** Rowing stroke

- Cover your client with towel (wipe off oil if client wishes)
- Break contact slowly or glide onto the next area

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FRONT OF LEGS

- Make contact and pause
- Define the area to be massaged
- Tuck towel into clothing or underwear
- Apply oil

1. **Effleurage** Rowing stroke over entire leg

Alternating V pumping to shin first, then thigh

Pulling to inner thigh

2. **Thigh** Kneading
 Deep pressure
 Strokes should be away from the groin for the inner thigh area

Percussion can be applied to the outer thigh

3. **Knee** Light circles and kneading around kneecap (patella)
 Bending the knee allows you to work into the muscle attachments around the patella and also to work on the calf muscles with jostling and deep stripping.

4. **Shin** Petrissage squeeze and knuckling at the side
 Deep pressure

5. **Effleurage** Rowing stroke

FOOT

- Make contact and pause
- If feet are sweaty or dirty you may consider giving a footbath
- For ticklish feet use firmer pressure or massage through the towel

1. **Joint movements** Rotate, flex, extend, invert and evert foot and toes

2. **Ankle** Massage achilles tendon with finger tips

3. **Heel** Squeeze the heel using the heels of your hands

4. **Sole** Apply deep pressure to the heel and sole using thumb strips, press release or knuckles.

5. **Toes** Massage each toe

6. **Top of the foot** Circle over the top of the foot with your finger-tips or thumbs.
 Slide between the tendons of the foot from the ankle to between each toe.
 Squeeze the top of the foot with the palms of your hands.

7. **Effleurage** Rowing stroke over leg and foot

8. **Finishing** Hold the foot and then slowly release or flow onto the other foot

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NECK AND SHOULDERS

- Make contact and pause
- Define the area to be massaged
- Tuck towel into clothing or underwear
- Apply oil

1. **Effleurage** Reverse rowing stroke over shoulders and neck
2. **Petrissage** Knuckling, finger circles or squeezing

Roll client's head towards one side

3. **Deep Pressure** One side at a time with fingers, thumbs, knuckles for slow sliding and press release on shoulders, neck and base of the skull.
Slide fingers underneath upper back.
Curl fingers upward and draw towards the base of the skull to create a slight feeling of stretch.
 4. **Effleurage** Rowing stroke
- Repeat deep pressure on opposite side.
 - Cover your client with towel (wipe off oil if client wishes)
 - Break contact slowly or glide onto the next area

FACE

- Make contact and pause or flow on from neck and head massage
- Apply oil or cream if needed (check with client)
- Avoid oil in hair if client requests

1. **Forehead** Slide across forehead with the fleshy part of the hand
2. **Temples** Circle at temples with fingertips
3. **Eye Sockets** Press around eye socket
Press up into upper bony eye socket and down into lower eye socket with middle or index fingers

Pause with palms or fingers over eyes to let heat soak in & relax eyes (Avoid dragging on delicate eye tissue)
4. **Cheeks** Slide from beside nose outwards and upwards across cheeks towards hairline
Massage muscle in centre of cheek (Masseter)
Slide above upper lip and below lower lip
5. **Chin & Jaw** Circle along chin & jaw between thumb & fingers
6. **Ears** Massage earlobes between thumb & fingers

Slide around front & back of ears
7. **Throat** Light strokes upward on throat
8. **Finishing** "Prayer Stroke" upwards from throat, side of face to scalp

Pause, then slowly break contact

ARM - SUPINE POSITION

- Make contact and pause
- Define the area to be massaged, covering the whole arm
- Tuck towel underneath the arm to cover side of the body
- Apply oil to whole arm

1. **Effleurage** Rowing stroke over entire arm, shoulder & hand

UPPER ARM

2. **Petrissage** Hold outer elbow with one hand and knead biceps muscle (inner part of upper arm)
Hold inner elbow with one hand and knead triceps muscle (outer part of upper arm) and deltoid (shoulder)

3. **Deep Pressure** Deep pressure strips on biceps muscle and deltoid
Fold clients arm across their body and apply deep pressure strips to triceps muscle and deltoid
Deep pressure can be applied by fingers, thumb, knuckles, palm or blade of the hand

4. **Elbow** Rub over point of the elbow with the palm of your hand and use small thumb strips around the elbow
Replace the arm onto the table and apply light circles around the inner elbow

FOREARM

2. **Petrissage** Knead entire forearm with one hand while holding the wrist

The client's elbow is supported on the table

3. **Deep Pressure** Deep pressure strips around entire forearm

4. **Effleurage** Rowing stroke over entire arm, shoulder & hand

- Cover the arm with the towel and flow onto the other side.

ARM - PRONE POSITION

Massage for the arm in the prone (face down) position is less effective but can be used at particular times. For instance:

- When a client has particularly sore arms and you want to give them a double treatment in both positions
- When a client is more comfortable lying prone.
- When you want to include the arms in less time.

Adapt your strokes for the prone position, observing the restrictions of movement at the shoulder.

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HAND

1. **Wrist** Circle both side of the wrists with you thumbs or fingers
2. **Palm of hand** Stretch the palm of the hand between your little fingers and apply pressure using your thumbs. Press release, sliding and circling can be used
3. **Back of hand** Slide between hand bones from wrist to fingers
4. **Fingers** Squeeze and rub each finger between your thumb and fingers
5. **Effleurage** Rowing stroke over entire arm and hand to link the massage together

CHEST MASSAGE

- It is essential for **all** massages, and particularly this sequence, that **informed consent** is basic right for the client. This means that all clients are fully informed of what they are being offered in the massage and agree to it, without any feeling of coercion or force. It is **not** sufficient to ask a female client if she wants to have her chest massaged and then massage her breasts.
- You need to ascertain that she is requesting or agreeing to her breast area being massaged. Massage of this area needs to be light and of proportionally less time than other areas of the body.
- Alternatives to massage the chest muscles but not breast area are covered in class.

FEMALE CLIENT

1. **Effleurage** Rowing stroke over front of the torso, without dragging on the breast area
2. **Petrissage** Gentle kneading up one side of the torso using more pressure over the pectoralis muscles and their attachment at the shoulder
3. **Deep Pressure** Deep pressure strips over one side of the upper chest from sternum (breast bone) out to shoulder
Continue down the chest area applying short strips of deep pressure 2-3cms out from sternum to avoid breast
Continue underneath breast sliding fingers between the ribs to the intercostal muscles
Deep pressure circles can be applied lateral to the side of the breast
Slide blade of the hand underneath the lower ribs to apply pressure to the diaphragm muscle
Circle on the sternum and then repeat petrissage and deep pressure on the other side
4. **Effleurage** Rowing stroke over torso

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MALE CLIENT

1. **Effleurage** Rowing stroke over front of the torso
2. **Petrissage** Kneading up one side of the torso using more pressure over the pectoralis muscles and their attachment at the shoulder
3. **Deep Pressure** Deep pressure strips over one side of the upper chest from sternum (breast bone) out to shoulder
Continue down the chest area applying strips of deep pressure across the chest, sliding fingers between the ribs to the intercostal muscles

Avoid pressure directly to the nipple area
Slide blade of the hand underneath the lower ribs to apply pressure to the diaphragm muscle

Circle on the sternum and then repeat petrissage and deep pressure on the other side
4. **Effleurage** Rowing stroke over torso

ABDOMEN

- All strokes on the abdomen should be gentle, slow and generally in a clockwise direction to aid elimination.
 - This massage is excellent for reducing stress-related abdominal problems and creating a calm feeling if the client wishes this part of their body to be massaged.
1. **Effleurage** Circular light strokes with one or alternating palms in a clockwise direction
 2. **Petrissage** Knead around the abdomen in a clockwise direction with a gentle squeezing motion or the knuckles or back of the hand
Using the blade of the hand, trace the diamond formed by the lower ribs and pelvis, which form the boundaries of the abdomen
 3. **Deep Pressure** Small deep pressure circles using the pads of the fingers in a clockwise direction
 4. **Slide & Lift** Reach underneath the body and slide your fingers outwards at the waist level giving a feeling of lightly lifting
Don't actually take any body weight, as this will cause strain
 5. **Effleurage** Circular stroke over abdomen

Pause, then break contact

POLARITY BALANCE

A lovely way to complete the massage is to cover your client with the towel and pause with your left hand on the chest and the right hand on the abdomen. Close your eyes and tune in to the feeling of the movement of your client's breath and the warmth in your hands. After a minute or more, very slowly remove your hands so that your client can't tell the exact moment when you break contact.

The polarity balance works with the principle of energy creating a circuit that is extremely relaxing. Experiment with this yourself and you may find some effect. It doesn't work as well if you do it with the opposite hands.

Benefits Of Sports Massage

A general massage can provide many benefits.

A sports massage, in addition to those benefits, can provide the following:

Effects of Pre-Event Massage

- increased tissue elasticity therefore enhancing mobility
- increased peripheral blood vessel dilation (and opens microcirculation)
- improve cellular nutrition due to increased tissue permeability
- reduce unnecessary muscle contractile activity
- improve communication between muscle and brain therefore more effective function
- reduced anxiety levels
- increased arousal levels
- focuses athlete on the task ahead
- encourages poise and symmetry

Effects of Post-Event Massage

- reduced muscle tension by promoting optimal resting length in muscles
- increased local blood flow and interchange of nutrients and metabolites from muscles and so accelerates restorative process
- reduced stress levels
- promotes mood enhancement and feelings of well being

Effects of Training Massage

- promotes muscle relaxation
- helps improve joint flexibility
- helps reduce adhesions and breakdown excessive scar formation in soft tissue lesions
- may be attending to muscle problems before injuries develop

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Aims Of Sports Massage

Training Massage

- to assist in the prevention of muscle injuries
- to help the athlete maintain muscle fitness during training phases
- to identify local muscle spasms and adhesions by using deep tissue techniques

Pre-event Massage

- to apply a dynamic, stimulating massage, unless the athlete is highly over-aroused
- to apply a short, sharp, firm massage that is also light, purposeful and painfree
- to help the athlete focus on the task to be performed

Post-Event Massage

- to reduce the effects of fatigue
- to accelerate the restorative process
- to enable the athlete to return faster to training or further competition

Contraindications

The following are contra-indicated where a Sports Massage is concerned.

1. Acute soft tissue injury (within 48 - 72 hours)
2. Fractures
3. Unconscious (vigorous massage of extremities may increase drop in BP and cause shock)
4. Infectious skin disorders
5. Swollen lymph nodes - get medical clearance
6. Intoxication - may induce vomiting
7. Inflammatory conditions - massage is contraindicated in any marked increase of body temperature or inflammation
8. Unknown pathologies
9. Conditions getting worse
10. Any other previously mentioned contraindications

Cautions

1. Varicose veins
2. Nerve pressure eg. carpal tunnel syndrome
3. Malignant tumours / Cancer - get medical clearance
4. Bony disorders - eg. osteoporosis
5. Aids and Hepatitis
6. Any other previously mentioned Cautions

Get Medical Clearance If Uncertain

The four components of basic sports massage:

1. Pre-event Massage

Physiologically, massage prior to competition can enhance flexibility and relieve any muscle tightness. Psychologically, it can be used to reduce anxiety and mental fatigue and/or arouse and prepare the mind and body for the forthcoming activity/event.

It is important that the athlete is neither too relaxed nor too stimulated, as either state will impair his/her ability to perform at optimum level.

2. Post-event Massage

Massage for recovery after competition is found to be 2-3 times more effective than rest. It has physiological and psychotherapeutic benefits that can assist in enhancing speedy recovery and return to training or further competition.

3. Training Massage/Injury Prevention

Regular massage treatments assist in promoting efficient muscle function (contraction and relaxation) and improved joint flexibility. It also provides an opportunity to detect muscle imbalances or spasm within a muscle that can then be treated possibly before injuries develop. The benefits of these treatments are cumulative, although most athletes notice an immediate improvement.

4. Stretching

Stretching aims to increase flexibility and it also helps to reduce muscle soreness. It is generally performed after massage in the pre-event phase and before massage in the post-event phase. Stretching is performed before and after every training session. Stretching can enhance the effect of massage - but massage never replaces stretching especially when the athlete is preparing for activity.

→ Stretching

The best way to prevent muscle tears is to warm up thoroughly before competition. Massage does this to some degree but it does not stretch the muscles. Increased flexibility increases an athlete's speed and agility and muscles that are fully stretched are less likely to become injured.

Stretching and warm-up exercises should be performed after a pre-competition massage and before any training or competition occurs.

Stretching and cool-down work is performed at the end of activity before post-competition massage.

Stretching exercises must be done slowly and deliberately. There are a number of different ways a muscle can be stretched but the two most common and probably the safest are:

i) PNF (Proprioceptive Neuromuscular Facilitation) Stretching

This is where a static stretch is followed by an isometric contraction of the muscle against an immovable resistance, for 6 seconds. The muscle is then relaxed and gently taken actively by the athlete to its new range. This process is repeated three times.

ii) Static Stretching

This is where a stretch is performed within the comfort zone. This position is then held for about 15 - 30 seconds, released and then repeated. The feeling of mild tension experienced at this level should subside during the duration of the stretch. A static stretch attempts to increase the resting length of a muscle.

iii) Ballistic Stretching

This involves fast, jerky bouncing movements where a double bounce is performed at the end of the range of movement, eg bouncing when touching the toes.

Disadvantages of Ballistic Stretching

These bouncing movements at the end of range involve the stretch reflex and consequently may cause tearing of myofibrils. This causes muscle soreness and reduces the effectiveness of stretching. Ballistic Stretching should never be used to improve flexibility.

After the above has been completed, it is then time to warm-up the body by increasing the circulation. This can be achieved by performing activities suitable to the competition concerned, e.g. running on the spot, practicing certain movements that would be used in a game.

Stretch Reflex:

Muscles are protected by a mechanism called the Stretch Reflex.

When muscle fibres are stretched too far (eg by bouncing or overstretching) a nerve reflex responds by sending a signal to the muscles to contract, this protects the muscle from injury. Therefore, when you stretch too far you tighten the muscles you are trying to stretch. Holding a stretch as far as you can go or bouncing up and down strains the muscles and activates the stretch reflex. These harmful methods cause pain and damage due to microscopic tearing of muscle fibres.

Tearing = formation of scar tissue in muscle and gradual loss of elasticity. Muscles become tight and sore.

The belief that pain = gain is dangerous: pain = something wrong!

Why stretch?

- to lengthen muscle and tendon units
- reduce muscle tension so increase
- relaxation possibilities
- prevent traumatic injuries
- promote blood circulation
- enhance performance

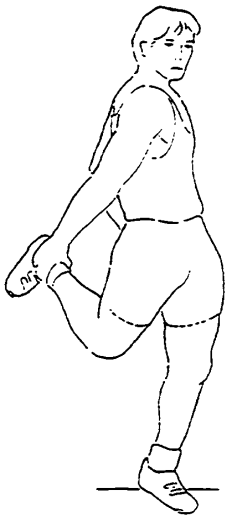
Aim of Stretching: to lengthen muscles, tendons and other tissues so movement doesn't cause excessive strain.

"The range of movements of all the joints of your forearm and hands should be full. If you have stiff hands, do a series of stretching exercises aimed at increasing your range of movement. The most important large range movements are:

- full abduction/extension of the thumb to give a wide grasp
- full flexion and extension of the wrists
- full pronation and supination of the radio-ulnar joints

Stretching Exercises

Quadriceps Stretch: (caution: avoid arching backwards)

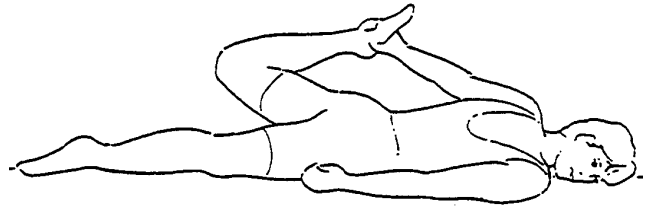


1. Standing stretch

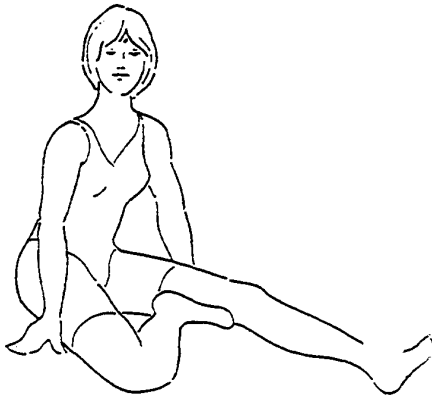
Bend knee, grasp ankle and pull until stretch pain is felt in front. Hold.

2. Prone Quadriceps Stretch

Lie face down, bend knee and grasp ankle. Pull slowly and hold.



Hamstring Stretch: (caution: look straight ahead, bend from the hips)

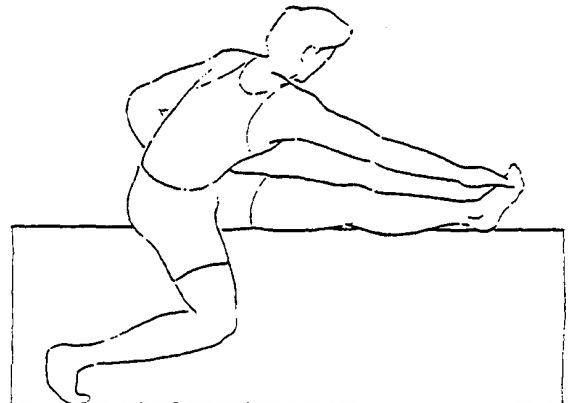


1. Seated stretch

One foot to inside of thigh of outstretched leg. Place hand either side, gently try to bend elbows without curving shoulders and upper back

2.

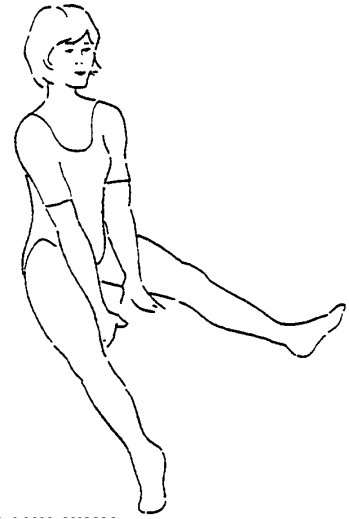
Sit on bed or bench with one leg out straight and the other with the foot on the floor. Stretch down as far as possible towards the toes of the straight leg. Hold.



Adductor Stretch:

(caution: look straight ahead, bend from the hips).

Sit with feet apart. Gently lean forward from the hips keeping the back straight.

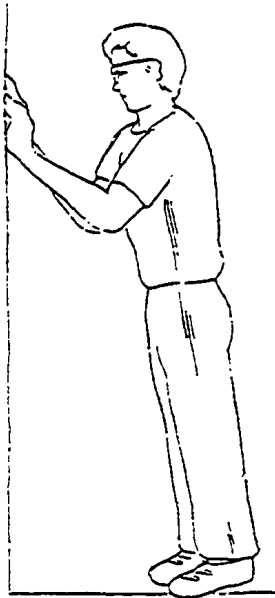


Calf Stretches:

1. Stand facing a wall. Lean towards the wall and place palms against surface. Keep heels flat on the ground and slowly bend arms to move the body closer to the wall and until you can feel a stretch in the calf muscles. Hold.

This can also be done one calf at a time by placing one leg behind the other and bending elbows and front leg.

2. Lean forward onto one leg, with forward knee bent. Push slowly forward, keep back heel and front heel on the ground-hold.



Anterior Compartment Stretch:

Stand as in the single calf stretch but this time place the toes of the rear foot on the ground. Apply gradual pressure downward by bending the front leg. Hold.



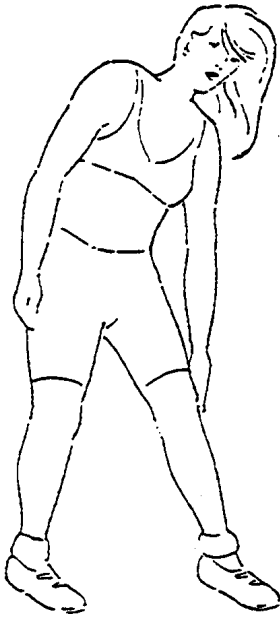
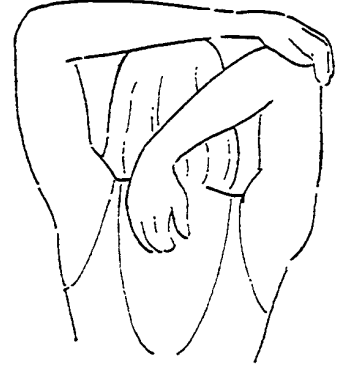


Pec Stretch

Stand in a doorway holding both sides. Lean forward and let the arms straighten. Vary the hand position to stretch different sections of the muscle.

Tricep Stretch

Reach down behind the head to touch tip of opposite shoulder blade. Grasp elbow with other hand, push down. Hold.



Trunk Stretch

Stand with feet apart. Stretch down with left hand to the outside of the left knee. Keep your back straight and hold. Repeat for other side.

Low Back Stretch

Lean forward from the kneeling position arms outstretched overhead. Top of the feet on the floor try to lower buttocks between the feet.



Training/Injury Prevention Massage

Called "training massage" as this type of massage is incorporated by many athletes as an essential component of their training program.

The more intense the training program or a greater frequency and duration of training, then the demand for training massage is increased.

Aim of Training

- To assist in the prevention of muscle injuries.
- To help the athlete maintain muscle fitness during training phases.
- To identify local muscle spasms and adhesions by using deep tissue techniques.

Effects of Training Massage

- Promotes muscle relaxation.
- Helps improve joint flexibility
- Helps reduce adhesions and breakdown excessive scar formation in soft tissue lesions.
- May be attending to muscle problems before injuries develop.

Pre-Event Massage

Pre-Event Massage is designed to prepare the athlete for optimal performance.

This massage is applied just before the warm-up routine and uses techniques the athlete is familiar with.

Aim of Pre-Event Massage

- to apply a dynamic, stimulating massage, unless the athlete is highly over-aroused
- to apply a short, sharp, firm massage that is also light, purposeful and painfree
- to help the athlete focus on the task to be performed

Effects of Pre-Event Massage

- increased tissue elasticity therefore enhancing mobility
- increased peripheral blood vessel dilation (and opens micro-circulation)
- improved cellular nutrition due to increased tissue permeability
- reduce unnecessary muscle contractile activity
- improve communication between muscle and brain therefore more effective function
- reduced anxiety levels
- increased arousal levels
- focuses athlete on the task ahead
- encouraging poise and symmetry

Pre-event Massage techniques

	<i>TECHNIQUES</i>	<i>INDICATION</i>
Jostling	Muscle jostling to whole length of muscle	To break down muscle inhibitions
Kneading	Muscle kneading and firm broad contact diagonal strokes	To induce hyperemia To reduce hypertonicity
Compression	Broad firm pressure to muscle belly (best suited to large muscle mass)	To induce hyperemia
Effleurage	Light and medium stroking	All of the above especially to reduce local regions of hypertonicity To enhance mind-body awareness
Ischaemic	Digital pressure to proximal, distal MTJs and mid-belly	

Post Event Massage (Recovery) Massage

Post-event massage is applied after cool-down to accelerate recovery from exercise, enabling the athlete to return faster to training or further competition.

Recovery massage has been found to promote mood-enhancement and feelings of well-being, by reducing tension, depression, anger, fatigue, anxiety and confusion.

Recovery Restoration - physiological recovery
 Regeneration - psychological recovery

Recovery massage applied in the post-training or post-competitive phase is considered to be at least 2-3 times more effective than rest.

As massage is reported to increase local blood flow, the consequent emptying of blood vessels and greater influx of fresh blood suggests that frequent short duration massages are beneficial.

Aims of Post-Event Massage

- to reduce the effects of fatigue
- to accelerate the restorative processes
- to enable the athlete to return faster to training or further competition.

Effects of Post-Event Massage

- reduced muscle tension by promoting optimal resting length in muscles
- increased local blood flow and interchange of nutrients and metabolites from muscles and so accelerates restorative process
- reduced stress levels
- promotes mood enhancement and feelings of wellbeing.

Post-Event Massage Techniques

Deep and superficial effeurage	to promote effects on venous and lymphatic channels to enhance clearance of metabolites and inflammatory products
Petrissage (gently kneading)	to free adhesions and promote muscle metabolism

Pressure varies according to the athlete's workload: light pressure if competition has been heavy or prolonged (marathon), or firmer and deeper if the competition has been relatively light.

Other techniques including ischaemic pressure and mobilizing are included in post-event massage in a more relaxed way compared to their application for pre-event.

NECK STRETCHES

Neck stretches are to be performed after a thorough warm-up of the muscles with massage.

Neck stretches should not be performed on anyone with recent or recurrent injury (especially after whiplash) or if pre-testing indicates any adverse reaction.

Lateral Stretch

- Support your client's head in your hands and, without lifting their head off the massage table, take their right ear towards their right shoulder until they feel a stretch.
- Hold for about 10 seconds.
- Support them in this position by holding their head with one hand and a slight pressure on their left shoulder with the other hand.
- Slowly return to the centre.
- Repeat on the other side.

Neck Flexion

- Slide your right arm under your client's head and place your hand on their left shoulder.
- Slide your left arm under their shoulder and place your hand on their right shoulder.
- Press on their shoulders and lift their head so that their chin comes towards their chest, until they say stop.
- Your forearms should be behind their head.
- Hold in this position for about 10 seconds.
- Slowly return their head to the table.

Traction

- Cradle your client's occiput in one hand and their chin in the other.
- With gentle pressure, lean back to extend their neck.
- Ensure that their neck remains parallel with the table.
- Hold for about 10 seconds then release.

Re-testing: - When the client is sitting up, re-test for any change in range of motion (hopefully an improvement).

Note: Acupressure points for headaches are contraindicated during pregnancy

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“Special Needs” Massage

“Special needs” clients include those who are:

- Pregnant
- Elderly
- Disabled
- Injured
- Children
- Babies

PREGNANT CLIENTS

It is important to not perform abdominal massage in the first trimester (ie. in the first three months of pregnancy) or some time after the birth. You must also take care with using essential oils. Specialist information is advisable as some essential oils are contraindicated for pregnant women.

During pregnancy there comes a time when lying prone becomes uncomfortable and even impossible. Other options are side lying, seated massage or special massage cushions to add to your table.

In the last trimester (ie. the last three months of pregnancy), supine lying needs extra care and the client is to be elevated to avoid blood restriction.

Benefits of Massage During Pregnancy

1. Relieves muscle spasms, cramps associated with the stress of extra weight bearing and physical changes that occur during pregnancy.
2. Reduces stress and teaches the mother to relax.

Relaxation is one of the keys to labor and delivery.

3. Gestation processed enhanced through increasing blood circulation, lymph circulation, reducing edema, increasing cellular respiration.
4. Provides emotional support and physical nurturing; this may be passed on to the baby
5. Assists in reducing the stress in the weight bearing joints and musculoskeletal structures.
6. Helps maximize breathing capacity which is needed during labor and delivery.

Pregnancy Contraindications

High Risk Pregnancies

Do not proceed without written release of physician.

1. Diabetic Mother
2. Cardiac Disorders- heart disease
3. Chronic Hypertension
4. Previous Problem in Pregnancy - previous miscarriage
5. Mothers under 20 or over 35
6. Asthmatic Mother
7. Suspected RH Negative Mother or other genetic problems
8. Drug addictions or exposure to drugs
9. Previous multiple births

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Proceed With Caution (Physician's Release Advised)

1. Incompetent cervix
2. Complications due to DES used during pregnancy
3. Lung or liver disorder
4. Severe anemia
5. Convulsive disorders
6. Abnormal Fetal Heartbeat
7. Decrease or absence of fetal movement
8. Interuterine growth retardation
9. Lupus Erythematosus
10. Poor lifestyle habits (drug abuse, poor nutrition, smoking, alcohol consumption)
11. Low weight gain
12. No prenatal care

Warning Signs of High Risk Factors

1. Possible Miscarriage - bloody discharge, continual abdominal pains, sudden gush of water or leakage of amniotic fluid
2. Urinary Tract Infections - very frequent urination with burning, low back pain increase in thirst and decrease in urination, chills and fever with 100 degree temperature or higher
3. Pre-eclampsia - (toxemia of pregnancy - if neglected or not treated properly may develop true eclampsia) Sudden rapid weight gain, systemic edema, increased blood pressure (hypertension), protein in urine, increased headaches
4. Eclampsia (Toxemia) **Emergency situation-refer to physician immediately-** Develops in 1 out of 200 patients with pre-eclampsia; persistent severe headaches; persistent severe back pain unrelieved by change of position; severe nausea/vomiting; systemic edema; pitted edema, increased blood pressure; visual disturbances; convulsions.
5. Gestational Diabetes - excessive hunger and thirst; increased urination in 2nd trimester; sugar in urine, no non-pregnant diabetes
6. Other conditions - thrombophlebitis; systemic infections; skin irritations; varicose veins; kidney disease; heart disease; cancer; acute injuries such as burns, bleeding, fractures

Contraindications for Massage

- Abdominal massage totally contraindicated for 1st trimester and limited to effleurage for remainder
- Gymnastics/ ROM - do not do movements when nausea present; or when symphysis pubis separates (2nd trimester)
- Pressure point around ankles and Achilles tendon should be avoided; pressure point between thumb and finger should be avoided
- Swedish strokes that affect circulation should not be used in the 3rd trimester if the client has a heart condition
- Tapotement contraindicated on the legs because of the increased danger of blood clots during pregnancy

Be conservative and consult the physician with any questions. Obtain release to work on client.

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Physiological Changes of Pregnancy and Bodywork Suggestions

Area of change	Changes	suggestions for massage/bodywork
Abdominal wall	<ul style="list-style-type: none"> • fascia, muscle, skin stretches • stretch marks may appear • rectus abdominus under considerable strain • linea alba may give way (diastasis recti) • abdominal contents protrude at midline 	<ul style="list-style-type: none"> <input type="checkbox"/> cross-fiber attachments of obliques along rib cage to relieve tension <input type="checkbox"/> avoid direct abdominal work
Breasts	<ul style="list-style-type: none"> <input type="checkbox"/> enlarged and sensitive by the 8th week <input type="checkbox"/> increased vascular supply <input type="checkbox"/> 5th month preparation for lactation <input type="checkbox"/> stretch marks <input type="checkbox"/> chloasma around nipples and areola 	N/A
Skin	<ul style="list-style-type: none"> <input type="checkbox"/> drier or oilier <input type="checkbox"/> acne <input type="checkbox"/> stretch marks <input type="checkbox"/> linea nigra -brownish streak down mid-line of abdomen <input type="checkbox"/> chloasma (mask of pregnancy) around eyes and in labia majora/minora 	<ul style="list-style-type: none"> <input type="checkbox"/> apply cocoa butter <input type="checkbox"/> apply the following mixture: 1/2 c virgin olive oil, 1/4 c aloe vera gel, 6 capsules vitamin E oil cut open, 4 capsules vitamin A cut open. Mix and store in refrigeration. Apply daily.
Pelvic floor	<ul style="list-style-type: none"> <input type="checkbox"/> stretches in preparation for labor <input type="checkbox"/> stretches due to extra weight of baby 	<ul style="list-style-type: none"> <input type="checkbox"/> Stretch adductor muscles <input type="checkbox"/> kegel exercises for strengthening
Circulatory system	<ul style="list-style-type: none"> <input type="checkbox"/> heart size increases and moves anteriorly (upward and to the left) <input type="checkbox"/> expansion of vascular channels <input type="checkbox"/> blood volume increases 30-50% <input type="checkbox"/> increase in red and white blood cells <input type="checkbox"/> interstitial fluid volume increases 40% in 3rd trimester causing edema in legs <input type="checkbox"/> femoral venous (saphenous, iliac, femoral, parametrial) pressure increases due to pressure of enlarging fetus on pelvic veins causes varicose veins and edema 	<ul style="list-style-type: none"> <input type="checkbox"/> Women with underlying heart disease at greatest risk for heart failure in 3rd trimester. <input type="checkbox"/> Use caution when working on legs as an increase in blood clots can occur. <input type="checkbox"/> Adductor muscles need to relax to relax the pelvic floor <input type="checkbox"/> Use side lying position
Respiratory	<ul style="list-style-type: none"> <input type="checkbox"/> increased breathing rate-possibly hyperventilation <input type="checkbox"/> lower rib cage flares out and diaphragm elevates to make room for the baby <input type="checkbox"/> accessory muscles used for breathing (scalenes, external intercostals, pec minor) 	<ul style="list-style-type: none"> <input type="checkbox"/> Teach breathing <input type="checkbox"/> release scalenes, intercostals, pec minor <input type="checkbox"/> release all rib cage areas
Gastrointestinal and Urinary	<ul style="list-style-type: none"> <input type="checkbox"/> saliva becomes more acidic increasing tooth decay <input type="checkbox"/> excessive gum bleeding <input type="checkbox"/> gastric acidity and vomiting in 1st trimester <input type="checkbox"/> peristaltic activity and muscle tone of colon decreased causing constipation <input type="checkbox"/> increased pressure on sigmoid colon causes constipation <input type="checkbox"/> 20th week: stomach pushed upward into left dome of diaphragm may cause hiatal hernia 	<ul style="list-style-type: none"> <input type="checkbox"/> Work with reflexology to stimulate digestion <input type="checkbox"/> Have mother urinate before session whether she needs to or not. Be prepared for her to get up and go during session.

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	<ul style="list-style-type: none"> <input type="checkbox"/> gall bladder emptying increases <input type="checkbox"/> urinary infections common <input type="checkbox"/> bladder capacity decreases as uterus enlarges 	
Musculoskeletal	<ul style="list-style-type: none"> <input type="checkbox"/> 10 weeks -hormone relaxing produced relaxing the ligaments in SI joint and symphysis pubis; also affects other ligaments <input type="checkbox"/> general decrease in myofascial pain <input type="checkbox"/> weight bearing joints placed under more stress due to weight gain and postural changes <input type="checkbox"/> weight gain in front of body causes woman to lean back changing the center of gravity allowing the pelvis to rotate forward, placing more stress on the SI joint, lumbar spine and stretches abdominals <input type="checkbox"/> other muscles stressed; pectoral, abdominals, QL, pelvic floor, erector spinae, iliopsoas 	<ul style="list-style-type: none"> <input type="checkbox"/> Increase their awareness of the connection between breath and relaxation <input type="checkbox"/> Work psoas of women before pregnancy <input type="checkbox"/> check position of tailbone
Endocrine	<ul style="list-style-type: none"> <input type="checkbox"/> increase in size and output of pituitary, thyroid, parathyroid, adrenal glands <input type="checkbox"/> estrogen targets thighs, buttocks, hips to store extra fat <input type="checkbox"/> estrogen increases size of uterus, cervix, genitals, breasts <input type="checkbox"/> estrogen decreases stomach acid which can lead to heart burn and indigestion <input type="checkbox"/> progesterone relaxes smooth muscle and dilates peripheral blood vessels, leading to decrease in peristaltic activity, urinary bladder dysfunction, hemorrhoids, varicose veins and edema. 	<ul style="list-style-type: none"> <input type="checkbox"/> do not do any reflexive work that stimulates endocrine points

Trimester Information for Massage Practitioners

First: 14 weeks from the 1st day of last period

Baby: from egg to 3 " long, fully developed body, arms, legs, nails, ears

Mother: uterus grows; heartbeat heard at day 26; increase in nausea and vomiting possible; at 10 weeks relaxin begins affecting joints - minimal structural changes occur; fatigue; increased blood volume and increased heart rate; metabolic changes; increase in frequency of urination; constipation; anemia; headaches and dizziness possibly due to hormonal changes.

Massage: Risk of miscarriage the highest; no abdominal massage; do massage to assist circulation; no reflex massage; no passive ROM if nauseated

Treatment plan: focus on postural alignment; pelvic, diaphragm, rib cage, low back. teach relaxation techniques and deep breathing exercises, kegel exercises, pelvic clock exercises

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Second: 14-28 weeks

Baby: grows to 11" and 1 1/2 lbs. fingerprints, eyebrows and eyelashes form; 16 weeks sensitive to light; 24 weeks hearing develops; 29 weeks opens eyes and looks to light source.

Mother: Structural changes: stress on low back upper back, pectorals; rib cage flares out at base and elevates; diaphragm elevates at rib attachments; breathing is mostly costal; abdominal breathing difficult; linea alba separates; center of gravity changes to adapt to extra weight held in front. Varicose veins and muscle cramping occur. Skin stretches. Breasts swollen and tender.

Massage: *Decreased* risk of miscarriage; deep tissue ok on areas of chronic stress; joints less stable due to relaxin especially SI joint, symphysis pubis and hips.

Treatment plan: Focus on increasing breathing capacity, releasing abdominal attachments at lower rib cage; releasing intercostals. Watch for sciatica, low back and upper back problems related with changes in center of gravity. Continue to teach relaxation and connection to breathing. Open up pelvic floor by working on adductors, hamstrings and rotators later in this stage.

Third: 28-40 weeks

Baby: 14-16 " and 2 1/2 -3 lbs: at start; grows to 5-9 lbs. and 20" in length; 29 weeks lungs developed; 32 weeks brain development, eyes track movement, sleep patterns develop.

Mother: Shortness of breath, difficulty breathing as uterus grows to rib cage; diaphragm rises 1 1/2 " upward; Difficult to move and walk; hemorrhoids, varicose veins, heartburn, hiatal hernias, frequent urination, constipation, trouble sleeping, edema in ankles and legs, carpal tunnel, stress to heart

Massage: same as in 2nd trimester

Treatment plan: Decrease stress to postural muscles - adductors, legs, hips, low back. Decrease edema. Increase relaxation.

ELDERLY, DISABLED, INJURED CLIENTS

These clients may need special consideration when lying on a massage table. Some may not be able to lie face down for various reasons – frailty, being bed-ridden, blood pressure, spinal problems or general discomfort.

Side lying and seated massages are alternatives in some of these situations. Always remember to take care with pressure and always ask the client their threshold levels.

CHILDREN AND BABIES

Research shows many benefits of massage for babies and children. Obvious considerations of young age are – attention span, support on the table, pressure, oils, ticklishness etc.

Specialist courses are available for massaging babies and children.

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Seated Massage – Over clothes

A seated massage over clothes is a quick, easy, portable and non-invasive way to give a massage.

- Ensure the client is sitting comfortably on an upright chair (low-backed) or on a special seated massage chair or table-attached massage face-hole, with feet apart and arms down by their sides.
- Make contact with their shoulders.
- Stroke (effleurage) from top of head, down neck, across shoulders, back and down arms.
- Squeeze (petrissage) the shoulders and back, supporting the body from the front as needed.
- Thumb press/release (deep pressure) slowly and to the client's threshold across the top of the shoulders and down the back one inch from spine either side. You can pay attention to trouble spots.
- Use thumbs and fingers to press in with circular movements for deep pressure across the scapula.
- Squeeze back and shoulders again and then down the arms to fingers, shaking arms gently.
- Stroke down the back, shoulders, head and arms again, finishing with strokes down the arms, placing hands on knees (if sitting in a chair) right to the end of finger tips. Or simply finish stroking and place your hand to rest on their shoulders.
- Pause and break contact slowly.
- If appropriate, a tapotement stroke can be used at the end across shoulders and back to "revive" and allow the person to "get back to work!"

What to do in a Difficult Situation

- Always be ethical.
- Refer to your code of ethics
- Stay professional, truthful and unambiguous in your instructions and requests.

When the facts of a situation are dealt with in a mature, methodical manner, the chances of that situation “blowing out” are minimised. Say what you feel, need or want and listen to those of others.

Remember, as a therapist you have the right to massage who you choose and can screen clients when making bookings. It is important to always remain respectful even when rejecting inappropriate behaviour. Do not act inappropriately yourself.

Look for support and assistance from co-workers, associations, support groups, friends/family, social workers, counsellors etc.

When to Refer a Client on

- When they have an undiagnosed pain or condition
- When they request another opinion
- When massage aggravates the condition
- When there is no improvement after the massage. This may happen after the first, second or, at maximum, third visit.

WHO TO REFER THEM TO

Physiotherapist

This therapist treats musculo-skeletal dysfunction using heat, ice, hydrotherapy, exercise, stretching, ultrasound, electrical current, manipulation and mechanical devices.

General practitioner

This doctor of allopathic medicine is legally able to diagnose with drugs and surgery.

Osteopath

An osteopath emphasises the correction of faulty body mechanics. They may use some soft tissue work as well as manipulation.

Naturopath

This therapist uses natural medicine to restore and maintain balance and health. The therapy may be herbal, vitamin, dietary or physical.

Chiropractor

A chiropractor treats by manipulation of the vertebral column. The emphasis is on spinal alignment to allow a free passage for nerve impulses.

Other practitioners you are aware of:

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Hand Exercises

To obtain these ranges of movement the following exercises should be practiced. Before each exercise check your shoulder relaxation:

1. Touch the finger tips of one hand with the finger tips of the other and press so that your thumbs and little fingers are separated widely.
2. Push the fist of one hand between two adjacent fingers of the other hand so that they are separated into wider abduction. Keep your fingers in the same plane. Repeat for each space.
3. Place your hands together as in prayer and with your thumbs resting on your chest push your wrists downwards to extend them without separating the heels of your hands.
1. Reverse your hands, placing the backs together and push your elbows downwards thus flexing your wrists.
5. Place your hands in the prayer position and keeping them together turn them down and up. Try to touch your abdomen and chest alternately at each rotation. When you can hold the full extension with your hands just very slightly separated practice the rotation of your two hands, not touching, but simultaneously. Next move your two hands alternately so that they pass one another at mid-point. Observe that the fingertips of each hand will now strike your abdomen at precisely the same point.

Training Massage Techniques

Effleurage techniques

- *light stroking*
 - using whole hand
 - both hands side by side (fan stroke)
 - reinforced hand (one hand on the other)

- *deep stroking*
 - pads of fingers
 - pads of thumbs
 - forearm or elbow

Petrissage techniques

- light pressure or deeper pressure

Deep friction techniques

- thumbs
- pads of fingers

Deep friction is performed within pain tolerance in a transverse direction against the muscle fibres. It can be a painful technique and can cause bruising

Digital Ischaemic Pressure

- thumb / forefinger / middle finger

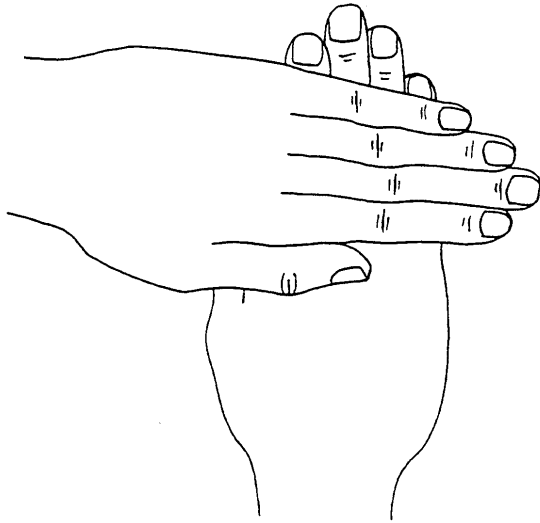
This technique applies pressure to points of tenderness. Pressure is maintained until a significant reduction of pain is elicited. Pressure is maintained in 6 second blocks.

Myofascial Release

Deep stroking against eccentric action.

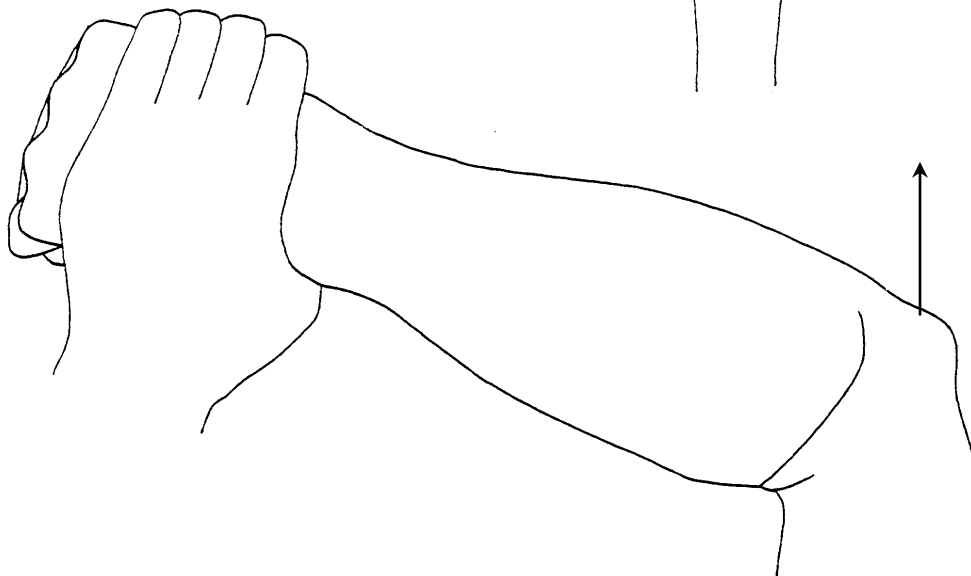
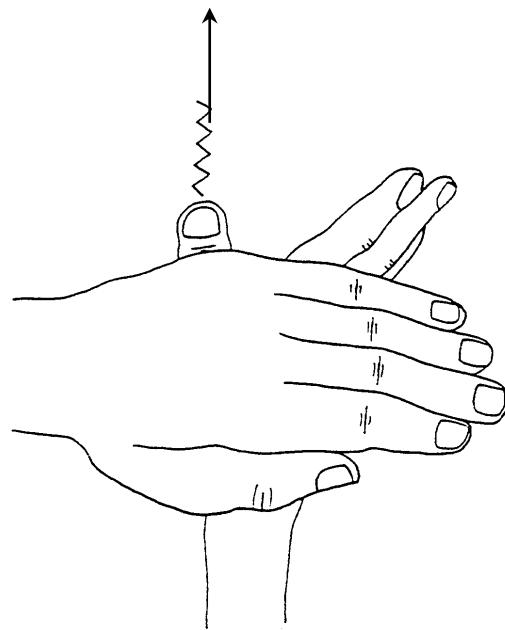
- Gastroc/soleus – plantar flexion to dorsiflexion
- Hamstrings – knee flexion to extension
- Tibialis anterior – dorsiflexion to plantar flexion
- Triceps – elbow extension to flexion

Deep Effleurage Techniques



Reinforced fingers with and across muscle fibres

Reinforced thumbs with short deep strokes or small zig-zag motion



Deep pressure using elbow
(not on point)

The following muscles are massaged using deep stroking:

client lying prone:

1. Proximal Gluteals

Deep stroking using reinforced fingers.

2. Quadratus Lumborum

Deep stroking using alternate hands reinforced fingers or hands side by side with pressure on index fingers.

3. Erector spinae

Deep stroking using reinforced fingers gradually going deeper and firmer also in small zig-zag motion or elbows (not on point).

4. Deep erector spinae (ie the muscles close to the vertebrae, in the gutter next to the spinous processes)

Using reinforced thumbs with short deep strokes small zig zag motion or elbows (not on point).

5. Trapezius/Rhomboids (ie the region between the spinous processes and the scapula)

Client's arms to be by their sides. Deep stroking using reinforced fingers up to medial border of scapula

6. Infraspinatus

Deep stroking using reinforced fingers under spine of scapula.

7. Triceps

Hang arm off side of table.

Deep stroking using both thumbs together from elbow to shoulder.

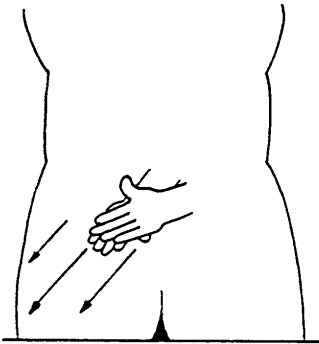
8. Trapezius

Deep stroking by pressing fingers to thumbs.

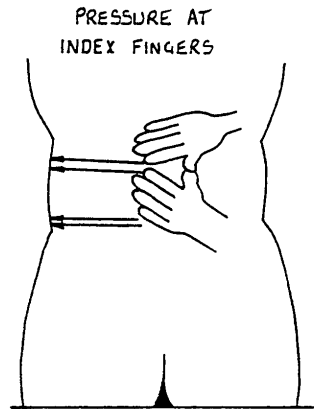
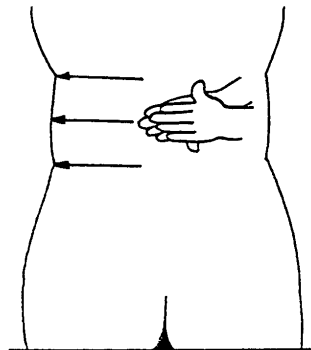
Back

Effleurage: Deep

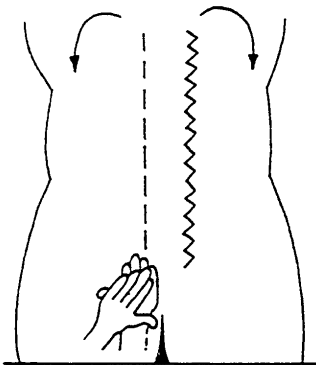
1. PROXIMAL GLUTEALS



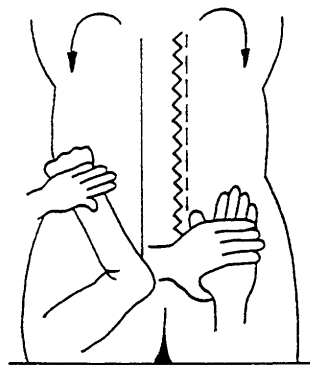
2. QUADRATUS LUMBORUM



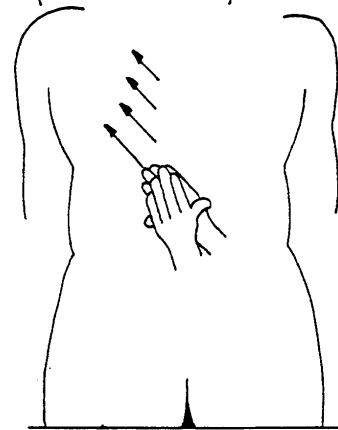
3. ERECTOR SPINAE



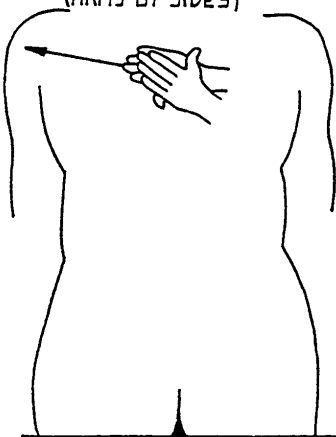
4. DEEP ERECTOR SPINAE



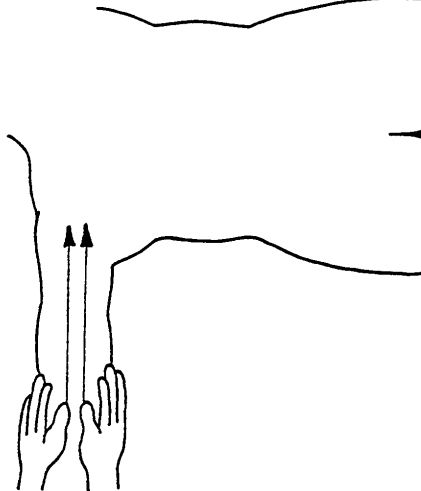
5. TRAPEZIUS / RHOMBOIDS
(ARMS BY SIDES)



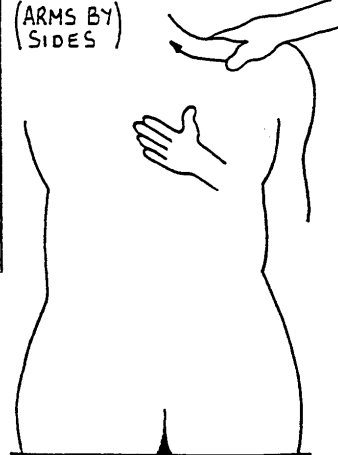
6. INFRASPINATUS
(ARMS BY SIDES)



7. TRICEPS



8. TRAPEZIUS
(ARMS BY SIDES)



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Legs: Client Side Lying

Effleurage: Deep

1a Gluteals (from behind client)

Deep stroking from iliac crest to greater trochanter using alternate hands/reinforced fingers.

1b Gluteals (from front of client)

Deep stroking from greater trochanter to iliac crest.

2 Iliotibial band

Deep stroking from knee to hip using reinforced fingers or both thumbs together.

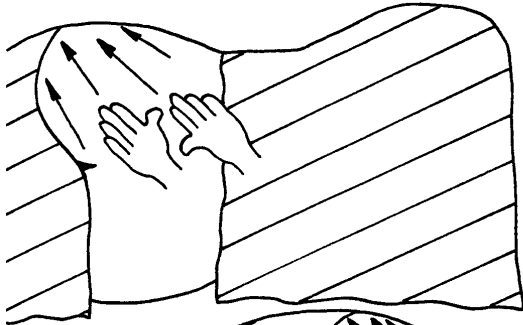
3. Peroneals (Lateral Compartment of leg)

Deep stroking using thumbs.
Reinforced fingers.
Or elbows (not on point).

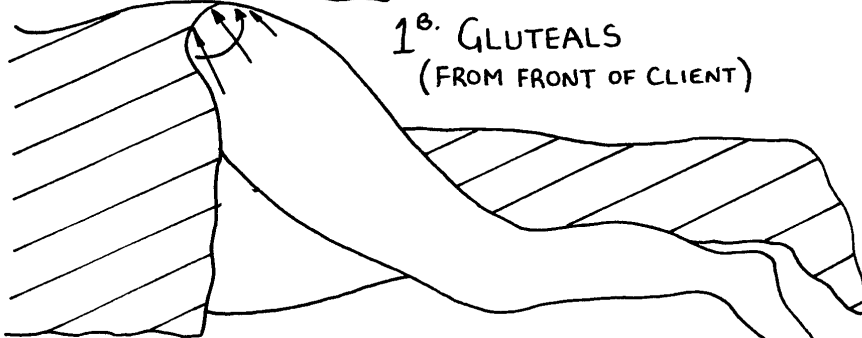
Legs: Client Side Lying

Effleurage: Deep

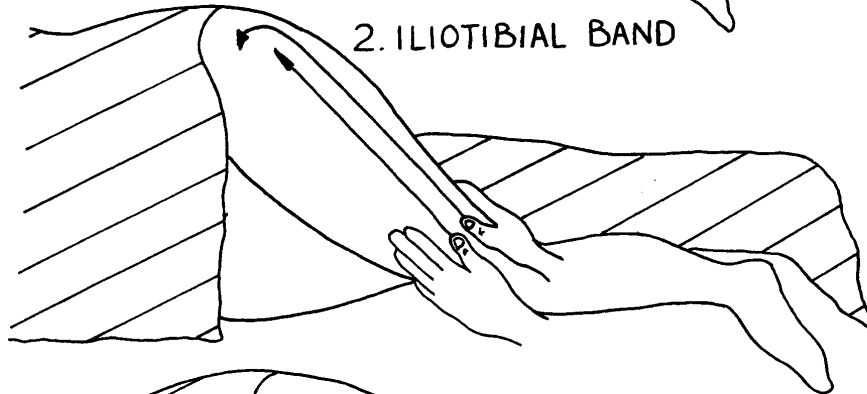
1^A. GLUTEALS
(FROM BEHIND CLIENT)



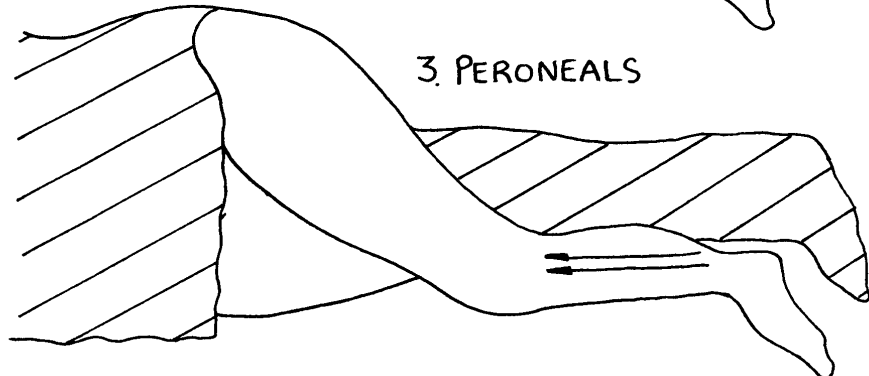
1^B. GLUTEALS
(FROM FRONT OF CLIENT)



2. ILIOTIBIAL BAND



3. PERONEALS



Legs: Posterior And Supine

Effleurage: Deep

Client lying prone

1. Hamstrings
Deep stroking using reinforced fingers
Or both thumbs together

2. Gastrocnemius
Deep stroking using reinforced fingers
Or both thumbs together

Client lying supine

1. Quadriceps
Deep stroking using reinforced fingers
Or both thumbs together

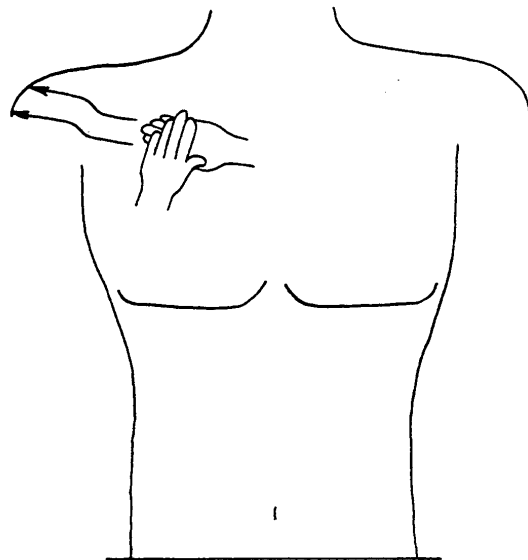
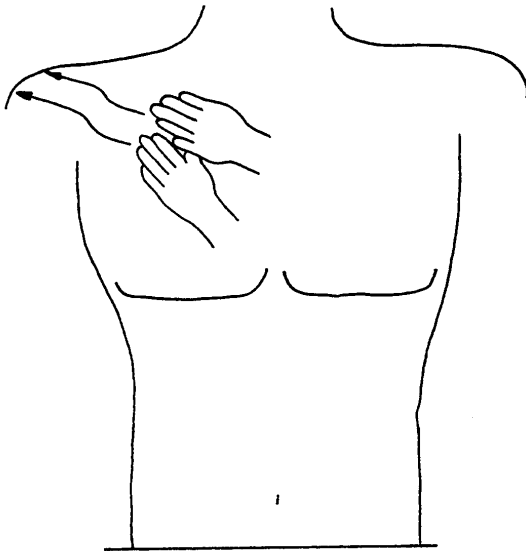
2. Anterior Compartment
Deep stroking using reinforced fingers
Or both thumbs together

Chest: Client Side Lying

Effleurage: Deep

Pectoralis Major

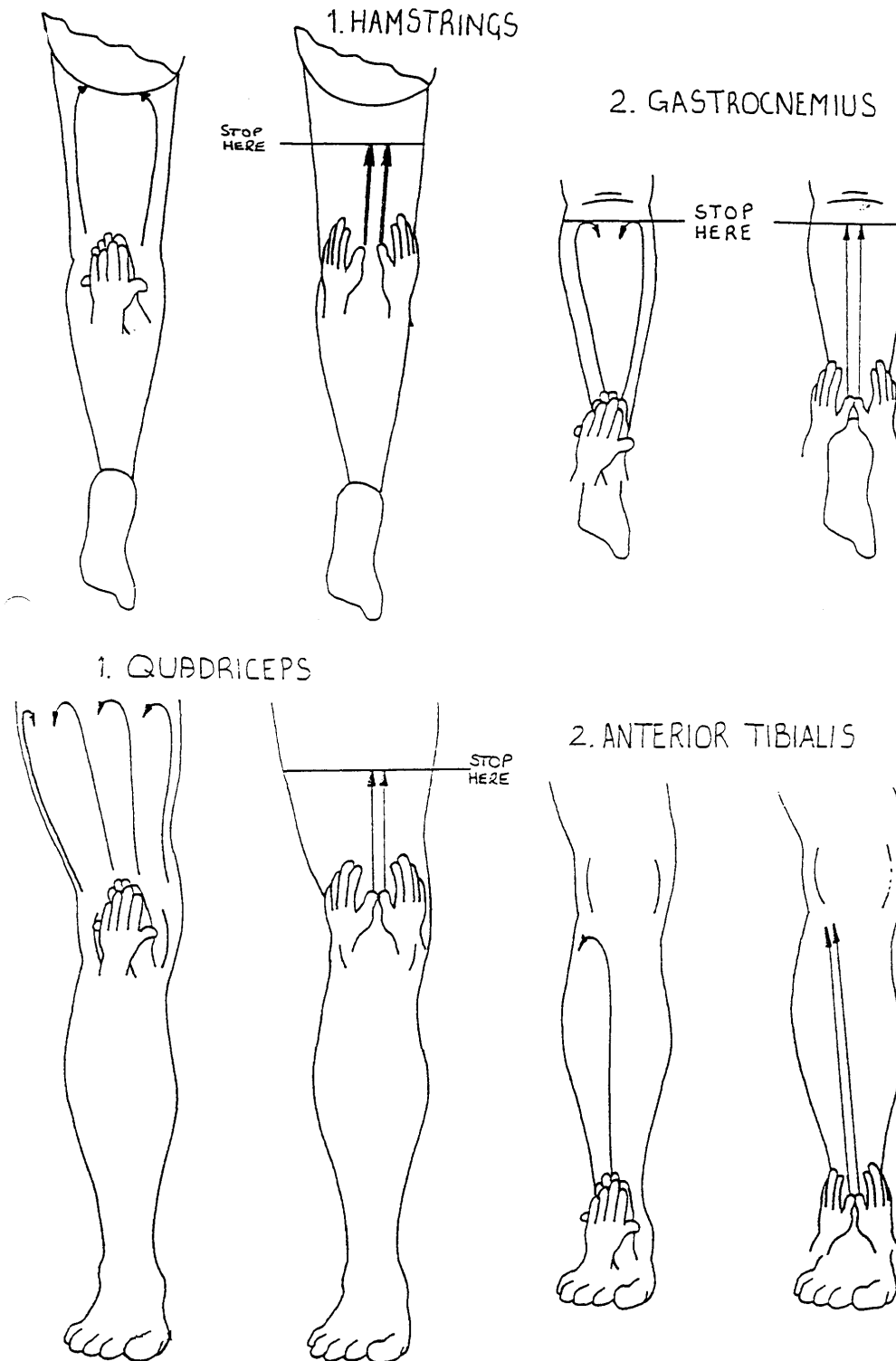
Deep stroking using both hands together



Or reinforced fingers

Legs: Posterior And Supine

Effleurage: Deep



Deep Transverse Friction

Technique:

Both hands linked together at index fingers.

Very deep pressure at fingertips to 'hook into muscle'.

Friction fingertips back and forth.

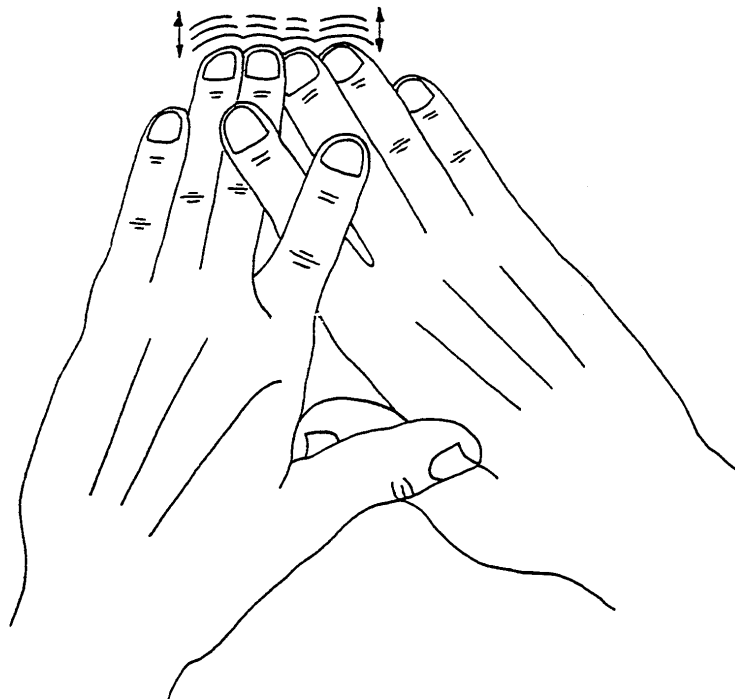
Performed mainly on:

Back: erector spinae

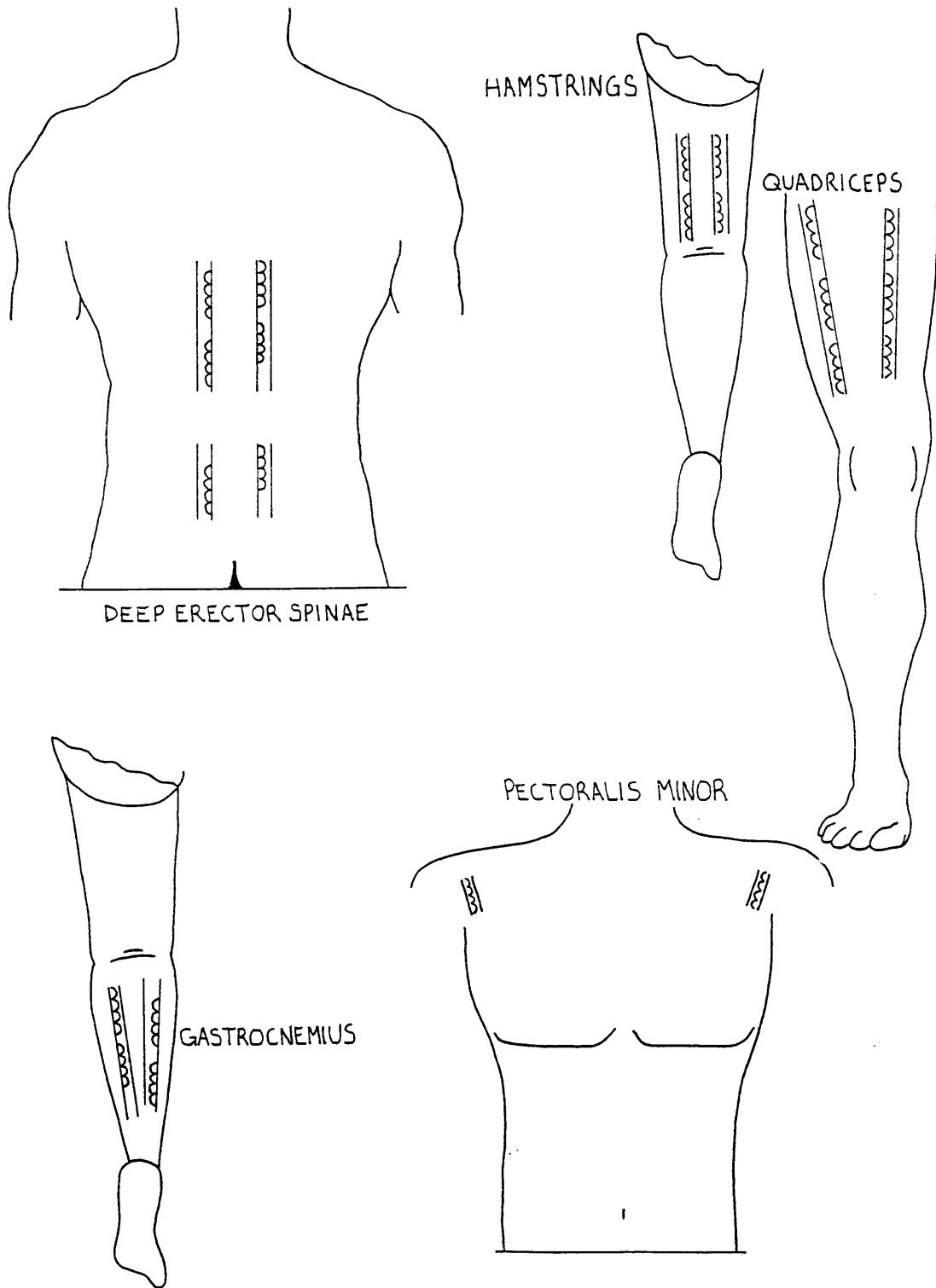
*Legs: hamstrings
 quadriceps
 gastrocnemius*

Chest: pectoralis minor (find coracoid process then protract shoulder girdle)

Caution: Deep friction techniques may be painful



Deep Transverse Friction



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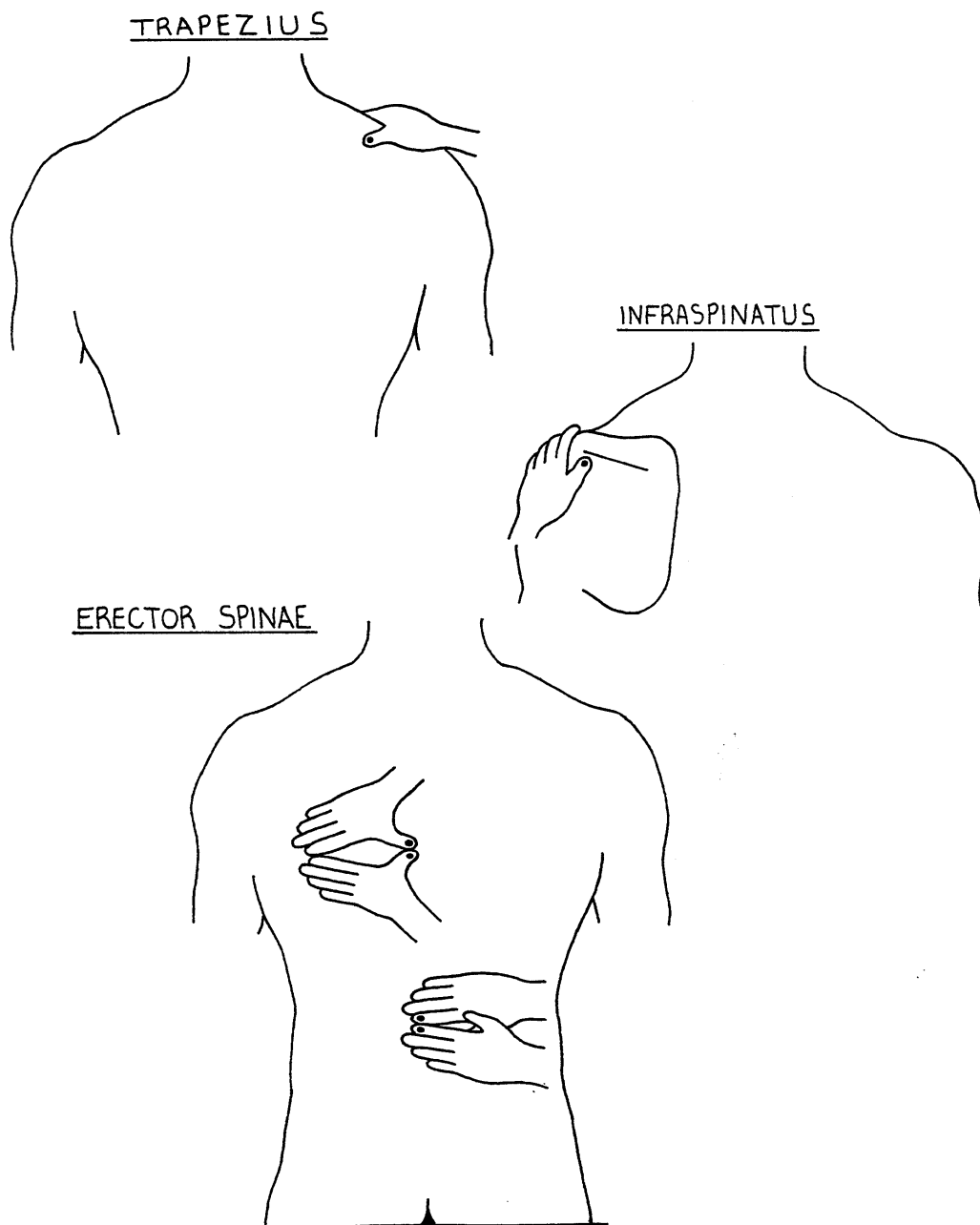
Digital Ischaemic Pressure

Using thumb/forefinger/middle finger

This technique applies pressure to points of tenderness

Pressure is maintained until a significant reduction of pain is elicited.

Pressure is maintained in six second blocks.



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Myofascial Release

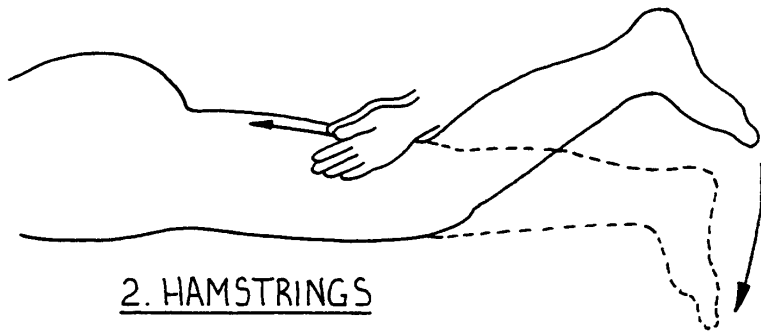
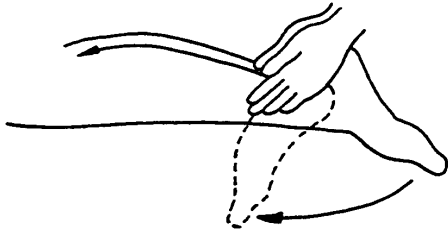
Technique: deep stroking, using both thumbs, against eccentric contraction.

The muscle which is being worked on should first be contracted actively by the client. Deep stroking using both thumbs together is then applied as client actively lengthens the muscle.

1. Gastrocnemius/soleus - Plantar Flexion To Dorsiflexion.
2. Hamstrings - Knee Flexion to Extension.
3. Triceps - Elbow Extension to Flexion.
4. Tibialis anterior - Dorsiflexion to Plantar Flexion.

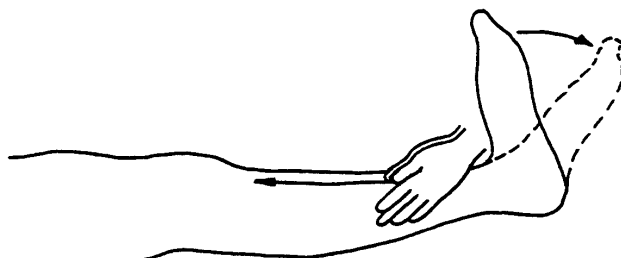
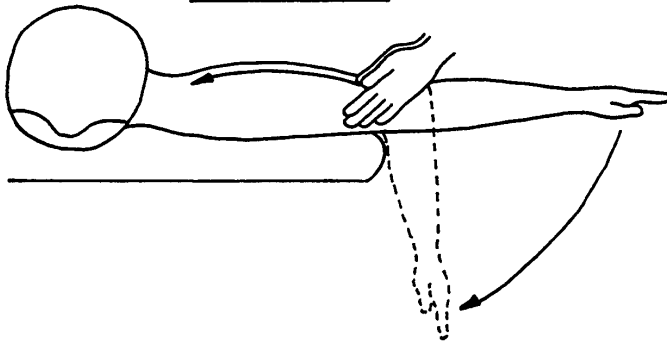
Myofascial Release

1. GASTROCNEMIUS / SOLEUS



2. HAMSTRINGS

3. TRICEPS



4. TIBIALIS ANTERIOR

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Soft Tissue Injuries

The most common injuries in sport are soft tissue injuries involving muscles, tendons, ligaments and related structures. However, these injuries may also accompany a dislocation or a fracture. If you are in doubt about the severity of an injury you should always treat it as a fracture.

Bruise (contusion) A blunt injury causing blood vessels below the skin surface to break.

Signs & Symptoms: On the onset there is inflammation, and later discolouration.
Pain
Swelling

Treatment: Apply an ice pack for up to 10 minutes. Reapply at 20 minute intervals, for at least 48 hours after impact. (a "cork" is a contusion injury).

Cramp Involuntary painful contraction of a muscle or a group of muscles.

Treatment Gently stretch out muscle and massage the affected area slowly. Salt intake should not be increased, just increase water intake.

Strains Over stretching or tearing of a MUSCLE or TENDON.

Sprains Over stretching or tearing of a LIGAMENT.

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Classification Of Soft Tissue Injury

1. Direct
 - contact with opponent, equipment, ground
2. Indirect
 - from sudden acute overload
 - overstretching the musculotendinous unit (muscle/tendon strain)
 - slipping on wet ground
 - excessive forceful contraction
 - fatigue
3. Overuse
 - biomechanical stress
 - poor technique
 - inadequate footwear
 - too hard playing surface
 - over-training

Grades of injury (ligament/muscle)

- | | | |
|-----------|-----------|--|
| Grade I | Mild: | pain following injury, could continue but should cease activity. Relatively few fibres affected. Pain limits increasing activity. |
| Grade II | Moderate: | painful enough to stop activity. More tissue fibres affected. |
| Grade III | Severe: | complete rupture through soft tissue with separation. Intense pain at the instant of the injury often followed by little or no pain. |
| Avulsion: | | soft tissue torn off the bone with a fragment of a bone. |

Dislocations and Fractures

During the examination of the injured person it is important to check, amongst other things, for the presence of fractures and dislocations. These should be assessed and treated in order of priority.

A fracture is a break in the continuity of a bone. Many fractures are easy to recognise because there is obvious deformity, e.g. where the bone has broken through the skin and others produce localised pain and swelling. Some can only be recognised by x-ray. Remember if the history of the accident suggests a fracture then it should be treated as a fracture.

Dislocation

A dislocation is a displacement of the bone ends at a joint. Where there is a dislocated joint, the capsule is torn and one of the bone ends is dislodged from its normal position. An accident of this nature may also cause a fracture!

So treat all dislocations as fractures, and never relocate them!

Types of fractures

All fractures can be classified in two broad categories and both can be complicated.

Closed fractures: The skin has not been broken.

Open fractures: The bone has broken through the skin. This may also involve a wound that extends to the fracture site. Open fractures are more serious than closed fractures because of the risk of infection.

Complicated fractures: Fractures are said to be complicated when there is associated injury, e.g. damage to blood vessels, nerves, vital organs and other structures.

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The treatment of the complication takes precedence over the fracture.

Signs & symptoms	P	Pain
	I	Inflammation
	L	Loss of power
	S	Swelling
	D	Deformity
	U	Unnatural Movement
	C	Crepitus
	T	Tenderness
	S	Shock

The aim of treating a fracture is to immobilise the fractured bone by immobilising the joints above and below the fracture site. Correct and thoughtful first aid will result in decreased pain and shock, reduce the casualty's stay in hospital and enhance their chances of a rapid return to normal activities.

Injury and Healing - Pathology of Injury

Once an injury has taken place, bleeding from the capillaries, arteries and veins occurs. This bleeding quickly spreads to the adjacent tissues causing inflammation. This leads to pain and tenderness. This acute inflammatory stage can last up to 48 hours depending on management and severity of injury.

After the bleeding and inflammation has been controlled an injury enters the repair phase (no healing occurs while inflammation is uncontrolled) which can last 72 hours - 6 weeks+. Generally, formation of new fibres takes place (muscle fibres will be shorter) along with the production of scar tissue. It is because of this scar tissue that areas of different elasticity may occur within the injured area.

This increases the risk of a recurrence of the injury at a later date if treatment and rehabilitation is not commenced.

After the repair phase the remodeling phase is entered which can last from six weeks - six months+. The remodeling phase is concerned with the remodeling of scar tissue bringing about the total rehabilitation of an injury - i.e. tissue status as close as possible to pre-injury state.

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Principles Of R.I.C.E Treatment

The accepted early management of both a strain and sprain injury in the first 48 hours is R.I.C.E.

REST	The injured part and the injured person should be at complete rest to assist in the recovery.
ICE	Cover an ice pack and apply it for periods of up to 10 minutes. For at least 48 hours.
COMPRESSION	Apply a firm elasticized bandage over the site.
ELEVATION	Elevate to minimise blood flow to the area.

The aim of treatment is to restrict movement, reduce swelling, and control bleeding in the injured area. Prompt application of R.I.C.E. will assist in the early recovery and return to normal activity.

Massage must not be administered in the first 48-72 hours after injury (depending on severity); the injury needs to be managed by R.I.C.E. treatment and a sports doctor.

Note: Heat should not be applied in the first 48 hours. Avoid hot baths, hot packs, and ray lamps

Alcohol: Should not be consumed in the first 48 hours after injury, as it encourages blood vessel dilation and increases bleeding.

Don't attempt to "run it out", this will cause further bleeding, swelling and pain.

Massage in the first 48 hours can cause further damage and bleeding. Don't attempt to 'run it out', this will cause further bleeding, swelling and pain.

Glossary Of Terms Commonly Used in Sports Massage

Arthroscopy	the examination of a joint with the aid of an instrument inserted into it
Atrophy	the wasting away of a normally developed organ or tissue due to degeneration of cells
Bursa	a small sac of fibrous tissue that is lined with a synovial membrane and filled with synovial fluid
Bursitis	an inflammation of a bursa resulting from injury or infection
Cartilage	a dense connective tissue composed of a matrix produced by specialist cells called chondroblasts
Chronic	of long duration involving very slow changes
Concentric contraction	a muscle contraction during simultaneous shortening of the muscle
Contraindication	any factor in a patient's condition that makes it unwise to pursue a certain line of treatment
Contusion	a bruise, or area of skin discoloration caused by the escape of blood from ruptured underlying vessels following injury (injury without a break in the skin)
Crepitus	a crackling sound or grating feeling produced by bone rubbing on bone or roughened cartilage or between tendon and tendon sheath
Cyst	an abnormal sac or closed cavity filled with liquid or semisolid matter
Dynamic muscle work	muscle work which varies the distance between the origin and insertion of the muscle by either shortening (concentric) or lengthening (eccentric) the muscle
Eccentric contraction	a muscle contraction which overall muscle length increases
Erythrocyte	red blood cell, contains haemoglobin for the transport of oxygen
Fascia	the connective tissue forming membranous layers of variable thickness in all regions of the body
Fibrosis	thickening and scarring of connective tissue
Flexibility training	a training technique to improve joint mobility, strength and co-ordination
Ganglion	any structure containing a collection of nerve cell bodies form of cystic tumour on an aponeurosis or tendon
Haematoma	an accumulation of blood within the tissues that clots to form a solid swelling
Haemorrhage	excessive bleeding

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Isokinetic training	.a form of muscle training performed at a constant speed and against an adjustable resistance
Isometric training	a form of muscle training used to increase the strength of a muscle after injury
Isotonic training	a form of muscle training performed at a constant level of muscular tension, under varying speeds
'itis'	suffix denoting inflammation of an organ or tissue
Ligament	a tough band of white fibrous connective tissue that links two bones together at a joint
Lumbago	lower back ache pain in the lumbar region
Meniscus	a crescent-shaped structure such as the fibrocartilaginous disc that divides the cavity of a synovial joint
Neuromuscular	relating to or composed of nerves and muscles
Oedema	an excessive accumulation of interstitial fluid in the body tissues
Osteoarthritis	non-inflammatory degenerative joint disease marked by degeneration of the articular cartilage, hypertrophy of bone at the margins and changes in the synovial membrane accompanied by pain and stiffness the process of examining a part of the body by careful
Palpation	feeling with the hands and finger-tips
Plantar fasciitis	an inflammation of the arch sheet on the plantar surface of the foot
Pronation	lying on the front face down
Sciatica	the pain felt down the back and outer side of the thigh, leg, foot and buttock neuralgia along the course of the sciatic nerve
Slipped disc	a misnomer discs don't slip a protrusion of the inner pulpy material (nucleus pulposus) of an intervertebral disc through the fibrous outer coat (annular fibrosis) causing pressure on adjoining nerve root disc herniation or disc rupture
Static Exercise	a type of muscle training without movement
Strength Training	a type of training used to increase the strength and diameter of a muscle by exercise with weights
Supination	the act of turning the hand or foot inward so that the palm or sole is uppermost
Soft tissues	muscles, tendons, ligaments, joint capsules
Supine	lying on the back or with the face upwards
Synovia	synovial fluid
Tendinitis	an inflammation of a tendon, often after excessive overuse

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Tendon	a tough whitish cord consisting of numerous parallel bundles of collagen fibres, attaches a muscle to a bone
Tennis Elbow	a painful inflammation of the tendon at the outer border of the elbow often caused by overuse of the forearm muscles (lateral epicondylitis)
Tenoperiostitis	an inflammation of a tendon attachment to the periosteum
Tenosynovitis	an inflammation of the tendon sheath

Back Massage:

- Ensure client is comfortable.
 - Make contact with both hands.
 - Ask permission to undo bra on females.
 - Define the area being massaged.
 - Tuck towel into underwear.
 - Apply oil
1. **Effleurage**
Rowing stroke, Single handed stroking, Double handed stroking, Horizontal (Sawing) stroking
 2. **Petrissage**
Picking up from buttocks to neck, Skin rolling
 3. **Sacrum**
Light effleurage circles on and around the sacrum
 4. **Deep pressure**
Along muscles beside spine (erector spinae) towards the heart

Across top of shoulders and into back of neck using press release
Along sides of neck using muscle squeezing
 5. **Effleurage**
Side stroking, Reverse rowing stroke
- Cover your client with the towel and wipe off the oil by using firm strokes.
 - Maintain contact for a few seconds and then cleanly break the contact.

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Abdominal Massage:

- Ensure client is comfortable.
 - Make contact with both hands.
 - Define the area being massaged.
 - Tuck towel into underwear.
 - Stand on right side of clients' body
 - Apply oil
1. **Effleurage** – light brushing circles in a clockwise direction around the belly button
 2. **Light gliding** – following the intestine
 3. **Separating the diaphragm** – place thumbs under ribs and glide out
 4. **Deep tissue** – Using your three middle fingers complete small circles up the ascending across the transverse and down the descending colon
 5. **Lifting stroke** – With both hands reach under back at waist level (lift and stretch) pull up sides of body from around waist.
 6. **Diamond shape** – Stroke with alternating from middle of ribs across to left side, from left side down toward middle of hips, from middle of hips up towards right side and from right side to middle of ribs
 7. **Horizontal push and pull** - Start with your fingers and end with your heel of your palm. (Continue the motion across their stomach.)
 8. **Effleurage** – finish with slow gentle circling of the abdomen maintaining a clockwise direction
 - Cover your client with the towel and wipe off the oil by using firm strokes
 - Maintaining contact for a few seconds then break

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Arm massage – supine position

- Define the area to be massaged, covering the whole arm
- Slide arm out from under towel and tuck towel underneath arm to cover the body
- Apply oil to whole arm

1. **Effleurage** Rowing stroke over entire arm, shoulder and hand
- UPPER ARM**
2. **Petrissage** Hold outer elbow with one hand knead biceps muscle (inner part of upper arm)
Hold inner elbow with one hand and knead triceps muscle (outer part of upper arm) and deltoid (shoulder)
 3. **Deep pressure** Deep pressure strips on biceps muscle and deltoid
Fold clients arm across their body and apply deep pressure strips to triceps and deltoid
 4. **Elbow** Rub over point of the elbow with the palm of your hand and use small thumb circles around the elbow
Replace arm down on the table and apply light circles on the inside of the elbow
- FOREARM**
5. **Petrissage** Knead entire forearm with one hand while holding the wrist
 6. **Deep pressure** Deep pressure strips down the length of the forearm
 7. **Effleurage** Rowing stroke over entire arm, shoulder and hand
 - Cover the arm with the towel and wipe off the oil, repeat on other arm.

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Face/Head/Neck massage:

- Use minimal oil on the face
 - No need to define the area, you do that when you apply the oil
1. **Begin with head/scalp massage** – quickly build up to a firm pressure using all of your finger tips so that you can feel the skin on the scalp moving, ensure to check for pressure as this is where tension headaches can sit so for some clients may need to be very gentle. Massage all over the scalp covering the entire area within the hairline
 2. **Prayer stroke** – to apply the oil to the face and define the area begin with hands in prayer stroke at the base of the chin and slowly but firmly pull up to the hairline.
 3. **Forehead lines and third eye**- Either use your fingers or palms to glide outwards then upwards
 4. **Outlining the jaw** - Either pinch their jaw line or glide with your palm
 5. **Sinus draining** - Use your fingers to glide around their sinus cavity
 6. **Temple release** – placing two fingers on the temple complete small gentle circular motions over the temple alternating between clockwise and anti-clockwise motion
 7. **Whole face glide** – using your fingers of both hands start in the middle of the face and glide outwards
 8. **Mouth release** - Use your index finger and thumb and slide to their cheeks
 9. **Prayer stroke**
 10. **Occipital pull** – at the base of the hairline hook your fingers under their occipital ridge and then pull towards you, then rock back and forth
 11. **Neck glide** – rotate their head once it is supported to one side and then glide up the exposed side
 12. **Circular frictions** - Friction in a circular motion under their occipital region
 13. **Chest sweeping** – placing palms and fingers along the borders of the collarbones sweep your hands outwards and over the shoulders
 14. **Pec and shoulder petrissage** – using your finger tips to perform petrissage over the pecs and up the shoulders
 15. **Frictions** - using your knuckles rotate over their pec region around their shoulders and up the sides of their neck
 16. **Gliding** - Lift their head up and rotate it so you can see the SCM, then glide down their neck (just posterior to the SCM).
 17. **Effleurage** – using light circular strokes over the pecs, shoulders and neck
 18. **Scalp** – finish with a few strokes across the scalp
 - Wipe oil of neck and shoulders
 - Press hands down into shoulders and hold then break contact

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Whole body massage routine.

Back/ Neck and Shoulders Massage:

- Go through COMFORT, CONTACT, PERMISSION and DEFINE for each of the areas and apply oil.

1. Effleurage

Rowing stroke, Single handed stroking, Double handed stroking, Horizontal (Sawing) stroking

2. Petrissage

Picking up from buttocks to neck, Skin rolling

3. Sacrum

Light effleurage circles on and around the sacrum

4. Deep pressure

Along muscles beside spine (erector spinae) towards the heart

Across top of shoulders and into back of neck using press release

Along sides of neck using muscle squeezing

5. Effleurage

Side stroking, Reverse rowing stroke

- Cover your client with the towel and wipe off the oil by using firm strokes
- Maintaining contact move to the back off the leg

Back of Legs massage:

1. Effleurage

Rowing stroke over entire leg (outside hand sits in front of inside hand)

V pumping over entire leg starting at calf

2. Thigh

Petrissage (picking up, kneading)

Deep pressure on Biceps Femoris and Semitendinosus

Tapping to the hamstrings gently

3. Knee

Light circles behind the knee

4. Calf

Petrissage (picking up, wringing, kneading)

Stocking seam

Deep pressure on Gastrocnemius and Soleus

Hacking to the calf

5. Ankle

Circles on either side of the Achilles tendon

6. Foot

Squeeze heel and sole of foot

7. Effleurage

Rowing stroke of entire leg

- Cover your client with towel and wipe off oil
- Turn your client

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Front of legs:

- Ensure comfort of client by placing pillow or folded up towel under neck and knees and covering them with a long towel and T-towel
 1. **Effleurage**
Rowing stroke over entire leg (outside hand sits in front of inside hand)

V pumping over entire leg starting at shin
 2. **Thigh**
Petrissage (picking up, kneading)

Deep pressure on Rectus Femoris
Hacking or cupping to the Rectus Femoris
 3. **Knee**
Light circles around the patella (kneecap)
 4. **Shin**
Petrissage to the sides of the shin

Deep pressure
Tapping on the Tibialis Anterior
 5. **Effleurage**
Rowing stroke of entire leg
 6. **Ankle**
Massage Achilles tendon with finger tips gently using pistol grip
 7. **Heel**
Squeeze the heel using the heels of your hand
 8. **Sole**
Apply deep pressure to the heel and sole using thumb strips, press release or knuckles
 9. **Toes**
Massage and click over the end of each toe
 10. **Top of foot**
Circle over the top of the foot with your finger tips or thumbs

Slide between the metatarsals of the foot from ankle to toes

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Arm massage – supine position

1. Effleurage

Rowing stroke over entire arm, shoulder and hand

UPPER ARM

2. Petrissage

Hold outer elbow with one hand knead biceps muscle (inner part of upper arm)

Hold inner elbow with one hand and knead triceps muscle (outer part of upper arm) and deltoid (shoulder)

3. Deep pressure

Deep pressure strips on biceps muscle and deltoid

Fold clients arm across their body and apply deep pressure strips to triceps and deltoid

4. Elbow

Rub over point of the elbow with the palm of your hand and use small thumb circles around the elbow

Replace arm down on the table and apply light circles on the inside of the elbow

FOREARM

5. Petrissage

Knead entire forearm with one hand while holding the wrist

6. Deep pressure

Deep pressure strips down the length of the forearm

7. Effleurage

Rowing stroke over entire arm, shoulder and hand

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Lower body advanced techniques.

Back (including upper buttocks)

- 1. Effleurage**
 - Rowing stroke
 - Single handed stroking
 - Double handed stroking
- 2. Petrissage**
 - Picking up from buttocks to neck
 - Skin rolling
- 3. Deep Pressure**
 - Arcs on buttocks (Heel press on the glutes)
 - Circular frictions along glutes
- 4. Sacrum**
 - Light effleurage circles on and around the sacrum
- 5. Fish hooks**
 - up the erector spinae to the shoulder blades then down the erector spinae to the shoulder blades
- 6. Vibrations**
 - Along the erector spinae
- 7. Deep pressure**
 - Along erector spinae towards the heart
 - Across top of shoulders and into back of neck using press release
 - Along sides of neck using muscle squeezing
- 8. Effleurage**
 - Side stroking
 - Reverse rowing stroke

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LEGS

1. **Effleurage**
hand)
Rowing stroke over entire leg (outside hand sits in front of inside hand)
V pumping over entire leg starting at calf
2. **Thigh**
Petrissage (picking up, kneading)
Deep pressure on Biceps Femoris and Semitendinosus
Tapping to the hamstrings gently
3. **Knee**
Light circles behind the knee
4. **Calf**
Petrissage (picking up, wringing, kneading)
Stocking seam
Deep pressure on Gastrocnemius and Soleus
Hacking to the calf
5. **Ankle**
Circles on either side of the Achilles tendon
6. **Foot**
Squeeze heel and sole of foot
Strips down length of foot
7. **Effleurage**
Rowing stroke of entire leg
- Front of legs:**
8. **Effleurage**
hand)
Rowing stroke over entire leg (outside hand sits in front of inside hand)
V pumping over entire leg starting at shin
9. **Thigh**
Petrissage (picking up, kneading)
Deep pressure on Rectus Femoris
Hacking or cupping to the Rectus Femoris
10. **Knee**
Light circles around the patella (kneecap)
Bend knee and work on ligaments and calf (jostling)
11. **Shin**
Petrissage (skin rolling) to the sides of the shin
Deep pressure
Vibrations to tibialis anterior
Tapping on the Tibialis Anterior
12. **Effleurage**
Rowing stroke of entire leg
13. **Foot Joint movements**
14. **Ankle**
Massage Achilles tendon with finger tips gently using pistol grip
15. **Top of foot**
Circle over the top of the foot with your finger tips or thumbs
Slide between the metatarsals of the foot from ankle to toes
16. **Toes**
Massage and click over the end of each toe
17. **Finishing**
release
Hold the foot firmly between both hands for a few seconds then release

Whole body massage

Back (including upper buttocks)/ Neck and Shoulders Massage:

- Go through COMFORT, CONTACT, PERMISSION and DEFINE for each of the areas and apply oil.

1. Effleurage

Rowing stroke, Single handed stroking, Double handed stroking, Horizontal (Sawing) stroking

2. Petrissage

Picking up from buttocks to neck, Skin rolling

3. Deep Pressure

Arcs on buttocks (Heel press on the glutes)

4. Sacrum

Light effleurage circles on and around the sacrum

5. Deep pressure

Along muscles beside spine (erector spinae) towards the heart

Across top of shoulders and into back of neck using press release

Along sides of neck using muscle squeezing

6. Effleurage

Side stroking, Reverse rowing stroke

- Cover your client with the towel and wipe off the oil by using firm strokes
- Maintaining contact move to the back of the leg

Back of Legs massage:

7. Effleurage

Rowing stroke over entire leg (outside hand sits in front of inside hand)

V pumping over entire leg starting at calf

8. Thigh

Petrissage (picking up, kneading)

Deep pressure on Biceps Femoris and Semitendinosus

Tapping to the hamstrings gently

9. Knee

Light circles behind the knee

10. Calf

Petrissage (picking up, wringing, kneading)

Stocking seam

Deep pressure on Gastrocnemius and Soleus

Hacking to the calf

11. Ankle

Circles on either side of the Achilles tendon

12. Foot

Squeeze heel and sole of foot

13. Effleurage

Rowing stroke of entire leg

- Cover your client with towel and wipe off oil
- Turn your client

Front of legs:

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- Ensure comfort of client by placing pillow or folded up towel under neck and knees and covering them with a long towel and T-towel

14. Effleurage

Rowing stroke over entire leg (outside hand sits in front of inside hand)

V pumping over entire leg starting at shin

15. Thigh

Petrissage (picking up, kneading)

Deep pressure on Rectus Femoris

Hacking or cupping to the Rectus Femoris

16. Knee

Light circles around the patella (kneecap)

17. Shin

Petrissage to the sides of the shin

Deep pressure

Tapping on the Tibialis Anterior

18. Effleurage

Rowing stroke of entire leg

19. Ankle

Massage Achilles tendon with finger tips gently using pistol grip

20. Heel

Squeeze the heel using the heels of your hand

21. Sole

Apply deep pressure to the heel and sole using thumb strips, press release or knuckles

22. Toes

Massage and click over the end of each toe

23. Top of foot

Circle over the top of the foot with your finger tips or thumbs

Slide between the metatarsals of the foot from ankle to toes

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Arm massage – supine position

24. Effleurage

Rowing stroke over entire arm, shoulder and hand

UPPER ARM

25. Petrissage

Hold outer elbow with one hand knead biceps muscle (inner part of upper arm)

Hold inner elbow with one hand and knead triceps muscle (outer part of upper arm) and deltoid (shoulder)

26. Deep pressure

Deep pressure strips on biceps muscle and deltoid

Fold clients arm across their body and apply deep pressure strips to triceps and deltoid

27. Elbow

Rub over point of the elbow with the palm of your hand and use small thumb circles around the elbow

Replace arm down on the table and apply light circles on the inside of the elbow

FOREARM

28. Petrissage

Knead entire forearm with one hand while holding the wrist

29. Deep pressure

Deep pressure strips down the length of the forearm

30. Effleurage

Rowing stroke over entire arm, shoulder and hand

Finish with a firm scalp massage and help client up from the table

Principles of Lymphatic Drainage Massage:

The pressure provided by massage mimics the drag and compressive forces of movement and respiration and can move to open the lymph capillaries. The pressure gradient from high pressure to low pressure is supported by creating low-pressure areas in the vessels proximal to the area to be drained.

Pressure:

Depth of pressure, speed and frequency, direction, rhythm, duration, and drag are adjusted to support the lymphatic system. The pressure should be just enough to move the skin. Lymphatics are mostly located in superficial tissues, in the outer 0.3mm of the skin, and surface oedema occurs in those superficial tissues, not in the deep tissue. Moving the skin moves the lymphatics. Stretching the lymphatics longitudinally, horizontally, and diagonally stimulates them to contract. Simple muscle tension puts pressure on the lymph vessels and may block them, interfering with efficient drainage. Massage can normalize this muscle tension. As the muscles relax, the lymph vessels open, and drainage is more efficient. Work on the areas of muscle tension first, using appropriate massage methods and pressure, and then finish the area with a lymph drain. Light pressure is used initially and then slightly increased as the area is drained.

Speed and Frequency:

The greater the amount of fluid in the tissue, the slower the massage movement. Massage strokes are repeated slowly at a rate of approximately 10 per minute in an area; this is approximately the rate at which the peripheral lymphatics contract.

Direction:

Move lymph toward the closest cluster of lymph nodes, which are located in the neck, axilla, and groin for the most part. Massage near nodes first then move the fluid toward them, working proximally from the swollen area toward the nodes. Massage the unaffected side first, then the obstructed side. For instance, if the right arm is swollen because of scar tissue from a muscle tear, massage the left arm first.

Rhythm:

The approach is rhythmic. Slow, rhythmic repetition of the massage movements stimulates a wave in the lymph fluid similar to intestinal peristalsis.

Duration:

Full-body lymph drainage massage lasts about 45 minutes. Focus on the local areas about 5 to 15 minutes. The methods of lymphatic massage are fairly simple, but lymphatic massage, when indicated, is a very powerful technique that elicits a bodywide response.

Indications for Lymphatic Drainage Massage:

Simple oedema, screened for contraindications (listed below), responds well to massage, focused on the lymphatic system. This approach is helpful for soft tissue injuries, including surgery (under doctors permission), because it speeds healing and reduces swelling.

Traveller's oedema is the result of enforced inactivity, such as sitting in a plane or a car for several hours. Interstitial fluid (tissue fluid) responds to gravity, causing swelling in the feet, hands, back of knees and buttocks of a person who has to sit without much movement for extended periods of time (office workers). Lymph drainage massage can remove the oedema and reduce the pain and stiffness caused by the oedema. Caution is indicated for the formation of blood clots with prolonged activity.

Exercise-induced DOMS is partially caused from increased fluid pressure on the soft tissues.

Lymphatic drainage is effective in reducing the pain and stiffness of this condition.

Lymph drainage also helps soften scar tissue and also allows for improved circulation.

Contraindications and cautions for Lymphatic Drainage Massage:

Oedematous tissues have poor oxygenation and reduced function, and they heal slowly after injury. Chronic oedema results in chronic inflammation and fibrosis, making the oedematous tissue course, thicker and less flexible.

Lymphatic drainage massage can lower blood pressure. If the client has low blood pressure, there is a danger that it will fall further and the client may be dizzy upon standing.

When a person is ill with a viral or bacterial infection and fever, circulation of lymph through the nodes slows, giving the lymphocytes (WBC responsible for the body's defence and immune system) more time to destroy the bacteria or virus. Because massage moves fluid through the lymphatic system more quickly, it can interfere with the body's efforts to defeat the attacking cells. During fever, white blood cells multiply more rapidly and bacteria and viruses multiply more slowly; fever therefore is part of the body's healing process. Because lymph drainage massage lowers the body's temperature, do not give a massage to a client with a fever.

Lymphatic drainage massage affects the circulation of fluid in the body and can overwhelm an already weak heart or kidneys. Do not give a lymph drainage massage to anyone with congestive heart failure or kidney failure or anyone undergoing kidney dialysis unless ordered by their physician.

BACK MASSAGE

- Make contact and pause
- Tuck towel into clothing or underwear
- Apply oil

1. Longitudinal Gliding:



Two

2. Transverse Gliding:



Single hands across back
Work from hips to shoulder then back down to hips

3. Kneading



Work on opposite side
e.g. Stand left to treat right

4. Transverse Gliding with Supported hands



In a circular motion across
Paraspinal muscles
Hip to shoulder x 3

MOVE TO HEAD OF TABLE

5. Longitudinal Gliding:



Hi|



MOVE BACK TO STARTING POSITION

6. Longitudinal Gliding



2 hands x 3
Decreasing pressure
as a lighter Finishing Stroke

- Cover your client with towel (wipe off oils)
- Hold base of neck and sacrum, Pause.
- Break contact slowly.

BACK OF LEGS

- Make contact and pause
- Tuck the towel into clothing or underwear
- Apply oil

1. Longitudinal Gliding:
Ankle to hip
Supported hands x 3



2. Transverse Gliding:
Wringing motion
Ankle to hip X 3



3. Kneading:
motion



4. Transverse Gliding:
Supported hands in a Circular
Ankle to hip x 3



5. Longitudinal Gliding:
2 hands x 3
Decreasing pressure as a lighter Finishing Stroke

- Cover leg with towel (wipe off oil)
- Place one hand at hip, other above ankle, Pause.
- Break contact slowly and move to other leg.



FRONT OF LEGS

- **Make contact and pause**
- Tuck the towel into clothing or underwear
- Apply oil

1. Longitudinal Gliding:

Ankle to hip
Supported hands x 3



2. Kneading

To thigh muscles



4. Transverse Gliding:

Supported hands in a circular motion



5. Longitudinal Gliding:

Supported hands x 3
Decreasing pressure
as a lighter Finishing Stroke



- Cover leg with towel (wipe off oil)
- Place one hand at hip, other above ankle, Pause
- Break contact slowly and move to other leg.

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FOOT: Patient supine

- Make contact and pause
- If feet are sweaty or dirty you may consider washing with a damp face-washer
- For ticklish feet use slower, firmer pressure or massage through the towel

1. Longitudinal Gliding:

Across top of foot: Two hands x 3



2. Transverse Gliding:

Circular motion with finger tips



3. Move the Toes

Gently pull on each toe
Move toes in circles
Bend and Straighten



4. Digital Pressure

Press thumbs into sole of foot



5. Longitudinal Gliding:

Supported hands
Connecting foot and Lower leg

Decreasing pressure as a
lighter Finishing Stroke



6. Finishing:

Hold the foot between two hands and slowly glide your hands off.

Remember to wipe the oil off the foot!

ARM and HAND:
Patient supine

- Make contact and pause
- Tuck towel underneath the arm to cover side of the body
- Apply oil

1. Longitudinal Gliding:

Over entire arm & shoulder
Stabilise the patients arm with your free hand



2. Transverse gliding:

Circular motion with a single hand
Use thumb to lead the movement



3. Longitudinal Gliding:

Over entire arm & shoulder,
Stabilise the patients arm with your free hand
Decreasing pressure as a lighter Finishing Stroke



Move to the Hand

1. Transverse Gliding: over hand and fingers



2. Move the Fingers

Pull gently on each
Move in circles
Bend and straighten



. Digital Pressure:

Press thumbs into palm

4. Transverse Gliding:

Stretch palm of the hand

Apply pressure using thumbs

5. Finishing:

Hold hand between both of yours

Pause

- Break contact slowly and move to other arm.



NECK AND SHOULDERS
(patient supine)

- Make contact and pause
- Tuck towel into clothing or underwear
- Apply oil or Cream

1. Longitudinal Gliding:

Over neck & shoulders

2 hand glide x 3

side
right
e.g. Slide fingers underneath upper back,
curl fingers upward and draw
towards the base of the skull to
create a slight feeling of stretch.



3. Digital Pressure:

Press on shoulders,
neck and base of the skull.

Break contact slowly or glide onto the next area

2. Transverse Gliding:

Roll client's head towards their left

Glide across the musculature on the

Repeat on opposite side



4. Longitudinal Gliding:

2 hand glide x 3
Decrease pressure as a lighter Finishing Stroke



FACE

- Make contact and pause or flow on from neck massage

- Apply face cream

1. Transverse Gliding:

- Slide thumbs across forehead
- Circle at temples with fingertips
- Gently slide from beside nose outwards and upwards across cheeks towards hairline
- Finger circles above upper lip and above chin



2. Digital Pressure:

Press around eye socket
Press up into bridge of nose and cheek bone

3. Longitudinal Gliding:

Up side of neck to face then scalp

4. Transverse Gliding:

Gentle circles with fingertips all over scalp
Gently tug hair

5. Pause with fingers over frontal pulse

- Wait for an even pulse
- Break contact slowly

