

TEXAS MASSAGE EDUCATION

SPORTS MASSAGE CERTIFICATION



THE GOAL OF SPORTS MASSAGE

The goal of Sports Massage is to achieve pain free movement with total symmetric balance of muscle groups, absence of adhesions and trigger points, complete or full range of motion, and a balance between strength, flexibility, and endurance in order to ensure optimal performance in every athlete.



WHAT IS SPORTS MASSAGE?

Sports Massage is a specific massage that supports fitness, helps reduce the demands that the sport places on the body, increases the performance ability, and enhances or shortens recovery time.

Who is an Athlete?










THE ATHLETE

A person who participates in sports as either an amateur or a professional. Life is a sport and this is relative for every individual. An activity that involves repetitive movement.

Sports  Athletic Activity

ATHLETIC ACTIVITY

An athletic activity involves the use of one group of muscles to perform in a specific way. Often this activity involves repetitive use of one group of muscles more than others. This may result in hypertrophy, changes in strength, movement patterns, connective tissue formation, and compensation patterns in the rest of the body.

THE TEAM

- Athlete
- Coaching staff
- Team Physician
- Trainer / Physical Trainer
- Massage Therapist

THE MEASURE OF HEALTH

Wellness



Based on Measurement

- Blood Pressure
- Body Fat
- Bone Density
- Triglycerides
- Good and Bad Cholesterol
- Flexibility
- Muscle Mass



Sickness



Fitness

PERFORMANCE VS. FITNESS

Peak Performance DOES NOT MEAN Peak Fitness

- Competing Athletes - May not be the most fit and healthy people that we work on.
- Could fall into the "Fragile Category"
- May lack in Peak Fitness

PERFORMANCE VS. FITNESS

Fitness - A lifestyle; A Body/Mind/Spirit Endeavor

Performance - The capacity to complete a sport-specific activity with skill and competence.

PERFORMANCE VS. FITNESS

Because of the increased, intense physical activity involved in attaining a higher skill and competence level, an athlete becomes prone to injury. A major strain for athletes is the demand of performance. Performance tends to exceed fitness, and requires increased energy expenditure, which in turn strains the adaptive mechanisms and increases recovery time. Fitness must be achieved before performance, and fitness must be supported to endure the ongoing strain of peak performance, the highest level of skill execution. Athletes who are de-conditioned and unfit because of **bad diet, lack of proper exercise, accelerated or multiple life stresses, as well as other negative lifestyle habits will experience some sort of illness or injury**. These illnesses can even be chronic in nature such a "chronic fatigue". These are considered weak links and we all have them. So adding massage could be a stressor that may put athlete into turmoil. The therapist must use massage "Cautiously" and be knowledgeable about the physiological effects of massage and the proper use of it.

GENERAL INDICATIONS

- Relaxation and Pleasure
- Anxiety Reduction
- Mild Depression Management
- Pain Management
- Mood Management
- Nerve Impingement Syndrome
- Inflammation Management
- Soft Tissue Dysfunction
- Effective digestion and elimination
- Enhanced growth, development, and regeneration of tissue
- Enhanced Immune function
- Efficient circulation of body fluids
- Exercise recovery and performance

CONTRAINDICATIONS

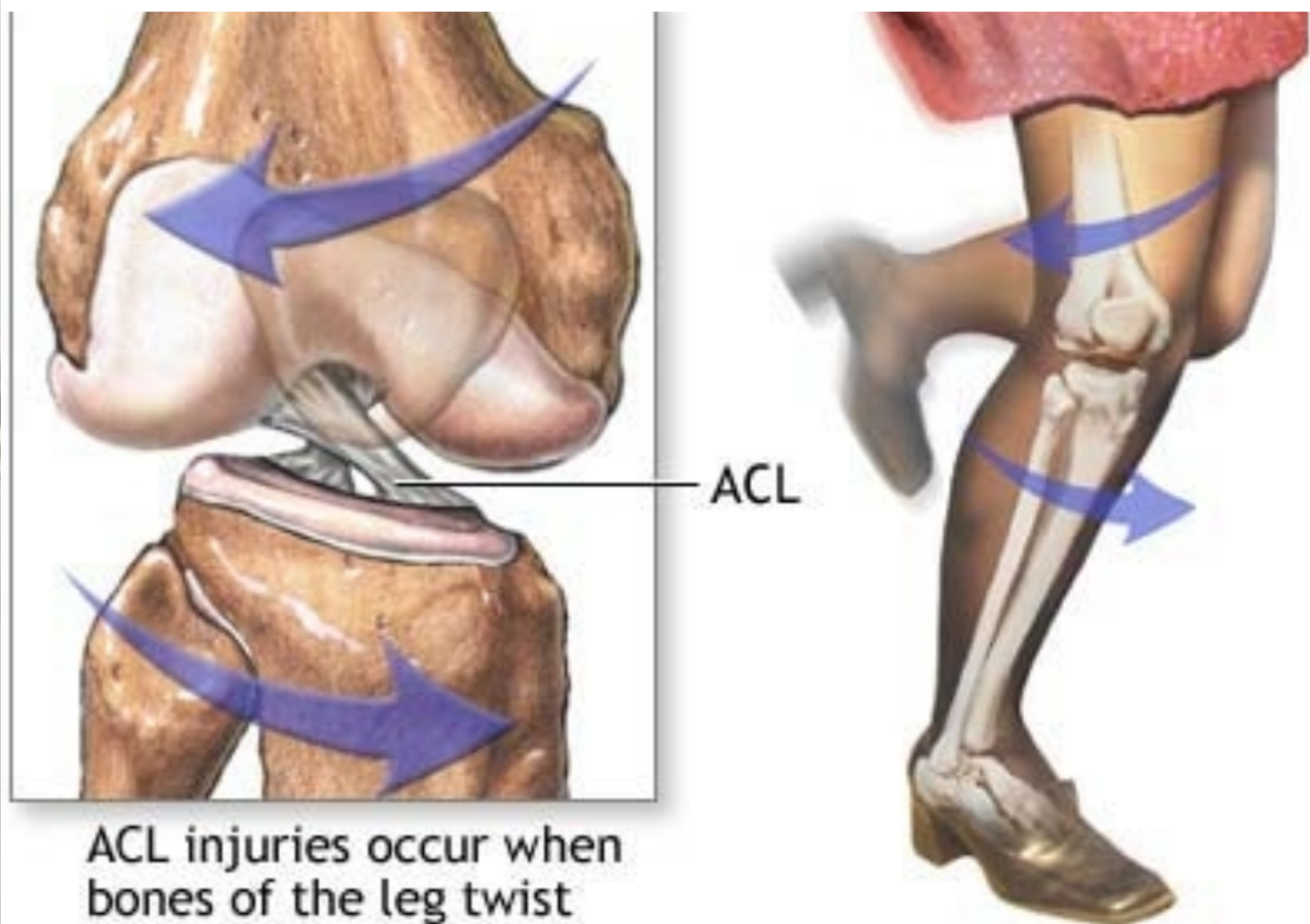
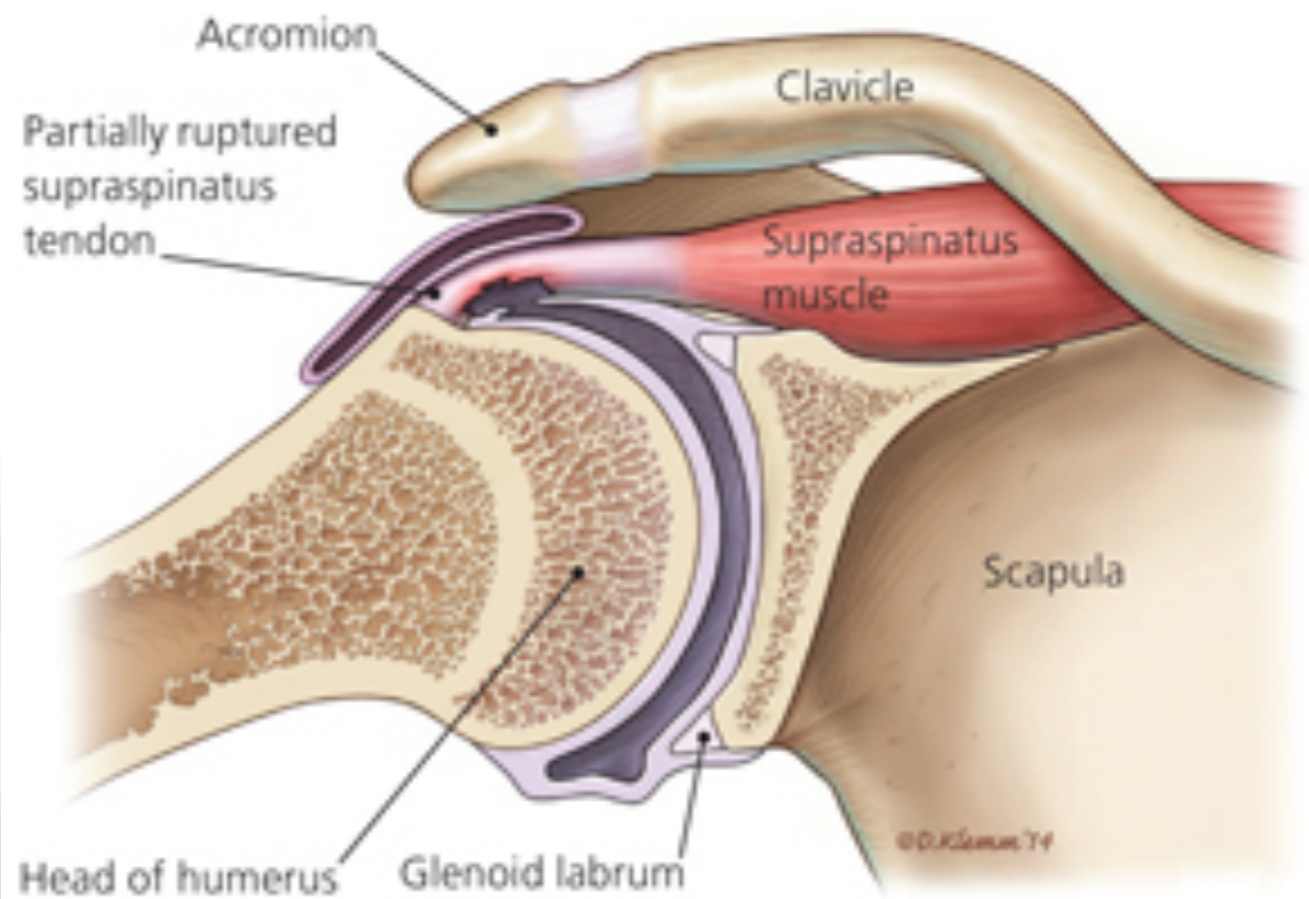
Rule of Thumb - When working with all athletes it is wise to be cautious and do not take risks. The closer the competition the more important this is.

ACUTE INJURIES

- Systemic Infection and acute inflammation
- Contagious conditions
- Loss of voluntary movement
- Acute or severe cardiac, liver, and kidney disease
- Use of sensation-altering substances, both prescribed (pain medication) and recreational (alcohol)
- Loss of sensation

WHEN IN DOUBT REFER OUT:

- Injury accompanied by severe pain
- Traumatic joint injuries
- Joint pain lasting for more than a couple of weeks
- Injuries that do not heal within 3 weeks
- Infection



ACL injuries occur when bones of the leg twist in opposite directions under full body weight

EVALUATING PAIN

There are many faces of Pain. The following guidelines may help the therapist evaluate pain so that the proper response, referral or plan may be put together.

Pain – Location

- Localized Pain – Pain at site of origin. Very confined to an area.
- Projected Pain - Nerve Compression. Pain/discomfort along a nerve pathway.
- Radiating Pain - Not well localized. Radiates to another area. On occasion or constantly.
- Referred Pain - Pain felt in an area, distant to site of the painful stimulus.

Ex: Trigger Point

TYPES OF PAIN

Pricking or Bright Pain - This type of pain is experienced when the skin is cut or jabbed with a sharp object. Generally it is short lived and easily localized.

Burning Pain - Slower to develop, generally last longer, and less localized. It is experienced when the skin is burned or when inflammation is present. It often stimulates cardiac and respiratory activity. Elevated heart rate, Elevated blood pressure.

Aching Pain - Aching pain occurs when the visceral organs are stimulated. It is constant, not well localized, and is often referred to other areas of the body far from where the damage is occurring. This type of pain is important since it may be a sign of a life-threatening disorder of a vital organ.

Deep Pain - Poorly localized, nauseating, and frequently associated with sweating and changes in blood pressure.

MUSCLE PAIN

If a muscle contracts rhythmically in the presence of adequate blood supply, pain does not usually result. However if the blood supply to a muscle is closed off, contraction soon causes pain. The pain will continue until blood flow is established. If a muscle is made to contract repeatedly without periods of relaxation it also begins to ache because the maintained contraction compresses the blood vessels that supply the muscle.

HOW TO RATE PAIN

- Non-Verbal Behaviors - facial grimacing, abnormal gait or posture, tearing, flinching, guarding of the body.
- Verbal and Emotional Signals - crying, sadness, irritability, changes in voice tone.
- Pain Scales – Scale 1 - 10

PAIN SCALES

- Pain Scales 1 thru 10 to indicate mild, moderate and severe pain.
- Only the client can determine the degree of severity.
- Pain can be fleeting.
- Pain is rarely the same at all times.
- Pain can be mild to severe and may be difficult for the client to verbalize.

Revised Pain Scale, From Hyperbole And A Half

Sourced from: <http://hyperboleandahalf.blogspot.com/2010/02/boyfriend-doesnt-have-ebola-probably.html>

Formatted to fit on standard letter-sized paper



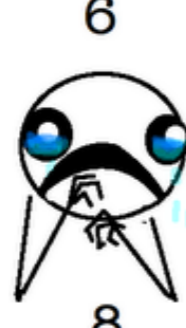
Hi. I'm not experiencing any pain at all. I don't know why I'm even here.



I probably just need a Band Aid.



My pain is not f***ing around.



Ow. Okay, my pain is *super* legit right now.



I'm experiencing a disturbing amount of pain. I might actually be dying. Please help.



I am actively being mauled by a bear.



Blood is going to explode out of my face at any moment.



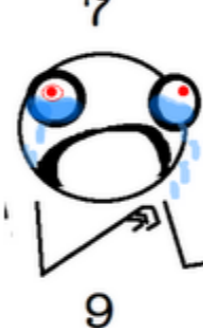
I'm completely unsure whether I am experiencing pain or itching or maybe I just have a bad taste in my mouth.



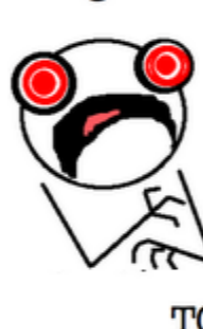
This is distressing. I don't want this to be happening to me at all.



Why is this happening to me??



I see Jesus coming for me and I'm scared.



I am almost definitely dying.

TOO SERIOUS FOR NUMBERS



You probably have ebola. It appears you may also be suffering from Stigmata and/or pinkeye.

Therapists are often enrolled in teaching the client about degrees of pain. Some clients have never been asked to evaluate their pain. Therefore it is likely to be an ongoing educational process. One way to point out to a client their improvement is to show them that they are making improvement. We have found that a beginning and ending pain scale identified by the client is extremely helpful in showing progress of the athlete. Be willing to explain to the athlete the value of knowing pain cycles, types of pain and degree of pain.

ACUTE VS. CHRONIC PAIN

Acute Pain

- Sudden onset and of short duration
- Lasts 24 to 72 hours (may resurface)
- Swelling, redness, heat, inflammation
- Moderate to intense pain
- Loss of Range of Motion (ROM)– Splinting
- Loss of function

Chronic Pain

- May persist for weeks, months, or years.
- Low grade of inflammation, warmth, swelling
- ROM – may or may not be affected.
- Gradual onset vs. later stages of acute injury

Acute Phase - Treatment

- No manual stimulation unless recommended by physician
- (RICE) - Rest, Ice, Compression, Elevation

OVERTRAINING AND OVER-USE

Overtraining Signs

- Inability to relax
- Lowered resistance
- Washed out feeling
- Performance may be suffering
- Painful muscles and joints
- Mild to persistent soreness
- Faster than normal pulse upon awakening

Sign of Over-use

- Poor Flexibility
- Improper training
- Muscle Imbalance
- Lack of Strength
- Improper equipment
- Hyper-toned tissue
- Lack of warm up

Any of the above will lead to compensatory movement. In Compensatory Movement we recruit secondary muscles to create movement that is supposed to be accomplished by certain primary muscles. Often these secondary muscles are smaller and less capable to do the job. This leads to overuse which will cause early fatigue and / or failure in these smaller muscles.

INJURY RECOGNITION

Contraindications:

- Acute injuries where there is ongoing Hemorrhaging
- Thrombus – blood clot
- Broken skin – open wound
- Acute stage of Injury – Must not treat until the symptoms of edema and inflammation have been arrested
- Infection – red streaks, swollen lymph glands, or fever.
- Dizziness, incoherent speech, inability to focus

When to Refer:

- Injury accompanied by severe pain
- Traumatic Joint Injuries
- Joint pain lasting for more than a couple of weeks
- Injuries that do not heal within 3 weeks
- Infection
- Dizziness, incoherent speech, inability to focus.

THREE STAGES OF HEALING:

1. Acute
2. Sub-acute
3. Maturation

PHYSIOLOGY OF HEALING

1. **Necrosis** - Tissue Death.
2. **Inflammation** - Redness and/or feverish.
3. **Regeneration** – restoration to original strength.
4. **Innervation** – redistribution of nerve.

Acute Stage

Sub-Acute

Maturation

Necrosis

Inflammation

Regeneration

Innervation

THREE
COMPONENTS
WITH-IN "THREE
STAGES OF
HEALING"

Purpose of this
Process

Estimated Time
for Healing

These physiological events involve three components:

1. Chemical
2. Vascular
3. Cellular

This process allows the body to:

1. Clean debris
2. Create repair tissue
3. Protect the injured area (from infection and trauma)

The amount of time is dependent on the following three conditions

1. Type of tissue damaged
2. Severity of the injury
3. Individuals general health and immune response

(These are just a few variables that can effect healing time)

Healing Equation

Amount of Damage = Amount of Exudate =
Healing Time

The Acute or Inflammatory Stage

Start: At time of tissue damage

Duration: 3 to 4 days, depending severity

Acute Stage and the events that take place:

1. Hemorrhage and inflammation (Primary edema/Inflammation)
2. Secondary edema formation
3. Pain and muscle spasm (Muscle splinting)
4. Hematoma or substrate organization

THE SUB-ACUTE STAGE

Start: 4 days after trauma

Duration: up to 6 weeks

Sub - Acute Stage & the events that take place:

1. Hematoma Organization
2. Proliferation
3. Beginning of Collagen remodeling

MATURATION STAGE

Start: 3 months

Duration: up to 1 year

5 STAGES OF REHABILITATION

1. Remove the Muscle Spasms
2. Assess and Correct Faulty Body Mechanics
3. Restore Flexibility
4. Rebuild Muscle Strength
5. Rebuild Endurance

SETTING & UNDERSTANDING REALISTIC GOALS FOR RECOVERY OF THE ATHLETE

1. Knowledge - "What do you know about your injury and why do you think you are here?"
2. Visualization - Show your athlete pictures of the injured area so that they have a full view and understanding of what is going on.
3. Goal Setting for Performance Evaluation - Injured athletes need to know the beginning, middle, and ending of rehabilitation and what to expect in terms of movement, pain, and performance.
4. Attitude – Remember that as a Sports Massage Therapist your opportunity to effect attitude is great. The way you present information, reinforce or challenge effort, carry yourself and/or communicate should always be positive.

Note: Remember the athlete needs to know his/her progress and have some means to document. Ex: Pain Scale, ROM assessment and movement assessment

CRYOTHERAPY IN SPORTS MASSAGE



- Whole Body Cryo Therapy
- People we have got to stop using ice
- <https://www.youtube.com/watch?v=0UmJVgEWZu4>

EFFECTS OF COLD THERAPY

- Creates an anesthetic effect
- Decreases muscle spasm
- Increases relaxation
- Interrupts the Pain – Spasm – Pain cycle
- Decreases metabolism
- Decreases circulation
- Increases circulation (with Movement)

HEAT CRAMPS

Symptoms: muscle cramps, fatigue. Legs can remain sore for up to 72 hours.

Treatment: After adequate fluid replacement and electrolytes/trace minerals, cramps will be relieved. Light pumping flushing massage speeds recovery. Studies indicate these cramps can be a result of imbalances in sodium, potassium, magnesium and lack of fluid replacement.

HEAT EXHAUSTION

Symptoms: Headache, nausea, chills, unsteadiness, fatigue, hair erection on chest. Skin is cool and pale. Sweating is prevalent

Treatment: Cool athlete off. Water and electrolyte and trace minerals.

OVERHEATING

A problem when you have high humidity and high temperature combination. When this condition happens and the water loss from sweat is not replaced by proper hydration then dehydration occurs. This leads to overheating. The body depends on sweat to cool the body by evaporation. When the humidity is at a point that evaporation is hindered then the body's core temperature goes up. This also could lead to overheating.

Symptoms: Racing heartbeat, weakness and fatigue.

Treatment: Refer to Medical Unit. Cool down athlete slowly. Get Athlete to take

to take water and electrolyte replacements. Keep athlete cooled down and out of

motion. May be weak, tired and achey for up to 3 to 4 days.

This is a Big Problem in Houston!!!!

HEAT STROKE

4. Heat Stroke is the failure of the body's heat controlling mechanism.

Symptoms: Incoherent speech, Confusion, aggressiveness, absence of sweating then occasional sweating. Extremely hot then cold.

Treatment: This constitutes an EXTREME EMERGENCY! Heat production exceeds heat loss. REFER TO MEDICAL UNIT or CALL 911. Attempt to slowly cool down athlete. Keep athlete out of motion. Drink slowly.

EVALUATION SHOULD IDENTIFY THREE KEY PIECES OF INFORMATION:

1. The structure
2. Stage of Healing
3. Severity of trauma

SOAP

SOAP note is the most widely used documentation and is the documentation that is used in the Sports Massage Certification course:

Subjective (S): what the athlete/client tells you about the problem

Objective (O): information of signs, that are measurable or quantifiable information

Assessment (A): The techniques, approach and muscles treated and the result observed during the session

Plan (P): The therapist treatment plan for the next session and homework for the client to perform.

ASSESSING RANGE OF MOTION

- Hips
- Shoulder
- Spine
- Neck
- Elbow
- Wrist
- Knee
- Ankle
- Finger and toes

ASSESSING GROSS MOVEMENT PATTERNS

- Squat
- Rotation
- Gait patterns (running or walking)
- movement during performance