

Strokes, Technique, and Application



Swedish/ Classic Massage

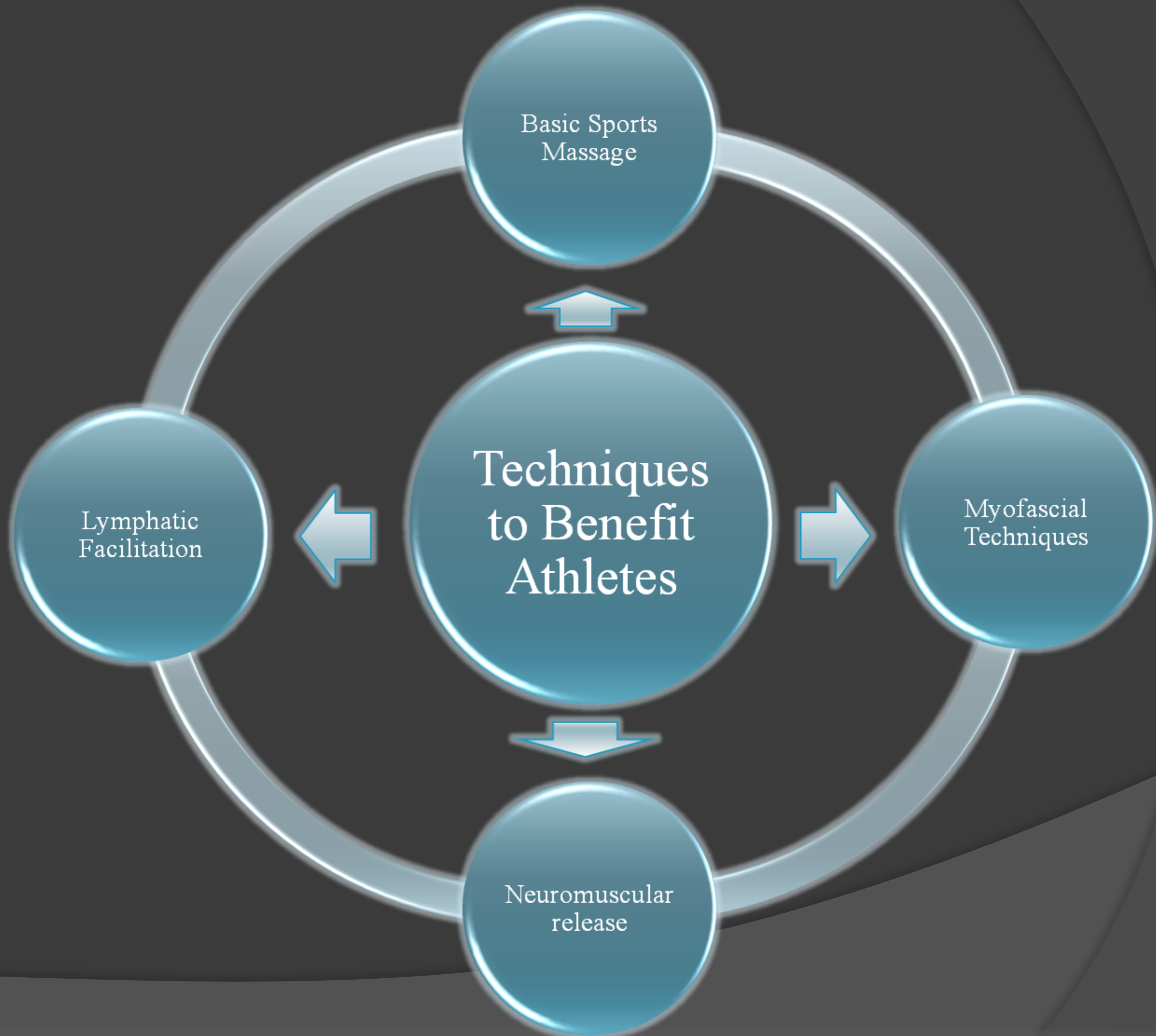
- Swedish/classic massage is an integration of gentle movement and light stretching with five styles of massage strokes: effleurage, pétrissage, friction, tapotement, and vibration/jostling

Basic Sports Massage

- Basic Sports Massage, A deeper, invigorating, and more anatomically specific massage that combines Swedish massage strokes with emphasis on compression, active assistive release and stretching (Active, Passive, or PNF)

General Rules

1. Work superficial to deep (ex: Skin, Superficial Fascia, Muscle Tissue)
2. Deeper means Slower
3. Work general to specific
4. Assessment and finding should guide massage session



Categories of Sports Massage

Pre-event - before the event

Inter-event - in between events (same day)

Post-event - after the event

Maintenance - treatment, prevention, and injury

Massage Strokes used in Sports Massage

- Effleurage
- Pétrissage
- Friction
- Jostling
- Tapotement
- Rhythmic Compression
- Active Assistive Techniques
- Stretching and Range of Motion



Deep Effleurage

- Gliding stroke that uses lubrication
- Strokes should be superficial initially, then deepen as the sequence progresses
- Always use the full surface of the hand
(Make full contact between your hand and the skin)
- Adjust pressure as needed to keep this stroke comfortable
- Distal to Proximal

Effects of Deep Effleurage

- Effective at moving blood through superficial veins and out of capillary beds
- Gives athlete kinesthetic awareness of full length and suppleness of the body part being massage

Cautions and Contraindication of Deep Effleurage

- If doing pre-event massage, you may not use lubrication because lubrication can make it difficult for the athlete to dissipate heat.
- Avoid areas of edema or a severe hematoma
- Varicose veins
- Open wounds/rashes associated with skin disease
- Cyst and tumors

Pétrissage/ Compressive Pétrissage

- Three forms : Two Handed, One handed, Bilateral
- Compressive Petrissage uses minimal lubrication during application
- Perform strokes at a brisk pace to stimulate muscle tone, Slow pace to stimulate relaxation of muscle and client

Effects of Petrissage

- Loosens and softens tissue (Skin, Fascia, Muscle and blood vessels)
- Decreases blood vessel restrictions
- Increased blood flow
- Believed to improve skin and muscle tone

Caution and Contraindication of Petrissage

- Used in all categories of sports massage
- Slower pace used for post-event to avoid cramping
- Use of lubrication is the same for Effleurage



Friction

- Any stroke that applies compression and stretch to the tissue
- Elbow, hand, fist, palm, heel of hand, braced fingers, thumb
- Lubrication use depends on application and intent of the stroke
- Minimal use of Lubrication

Effects of Friction

- Stretch and broaden muscle tissue
- Reduces fascial restrictions
- Enhances collagen remodeling
- Maintains general flexibility and pain-free range of motion
- Causes histamine release and local hyperemia which enhances local fluid movement

Cautions and Contraindication of Friction

- Can be used in every category of sports massage
- Used after the tissue has softened by pétrissage strokes
- Cautious about the rate at which depth is added
- Post-event massage, slow the pace of application to avoid pain and cramping
- If hypothermia occurs, vigorous friction is contraindicated in extremities, may lead to shock, in this case first aid measures are a priority

Jostling

- Vigorous forms of shaking that move larger masses of tissue

Three types:

1. Stationary hand position, using two hands to shake the muscle tissue
2. Stationary hands shaking the entire limb
3. Traveling stroke using one or both hands to shake the tissue as the hands travel

Effects of Jostling

- Stimulation of Mechanoreceptors in muscles
- Release subconscious tension or holding, also called muscle guarding
- Loosens superficial tissue
- Invigorating to athletes when done briskly
- Relaxing when done slower

Cautions and Contraindication of Jostling

- History of dislocation contraindicates vigorous jostling, but large muscle groups in the limb may be jostled at a slower less vigorous pace
- Post-event massage, avoid vigorous jostling to reduce the risk of stimulating cramps
- Contraindicated in cases of hypothermia

Tapotement

- Percussive stroke using the hand, loose fist, or finger tips, by rhythmically alternating strikes

Five types of Tapotement:

1. Spatting- palm of the hand
2. Drumming- loose fist
3. Hacking- ulnar border of the hand
4. Pincement- thumbs and fingers to pick up tissue in a rapid but gentle pinching movement
5. Cupping- cupped palm of the hands using the outer border to make contact with the tissue

Tapotement

- Reddening of the area, Muscle Toning or relaxation, sense of invigoration
- Primarily used to invigorate the athlete during pre-event massage
- Tapotement and Petrissage can both be used to restore muscle tissue after a joint has been immobile for a while.

Cautions and Contraindication of Tapotement

- Beating and Hacking used only in thick or heavily muscled areas
- Should not be applied over joints or bony landmarks
- Athletes with asthma should not get tapotement over the chest or the sternum, could stimulate an asthma attack
- Tapotement is too vigorous for post-event massage and should be avoided in muscles that have cramped during the event
- Neurological based atrophy, beating and hacking are contraindicated, but pincement and tapping are recommended but used with great caution to avoid severe damage

Rhythmic Compression

- Is used to create a squeezing action on both sides of the tissue between bone and therapist hand
- Loose fist recommended over the palm and for large surface areas (loose fist is easier to keep wrist straight)
- Open palm recommended for smaller muscle groups
- Tissue is compressed directly into the bone
- Slightly overlap each stroke
- Hands remain in contact with the tissue
- Minimum of three rhythmic compressions in same area to create softening and hyperemia

Effects of Rhythmic Compression

- When done briskly it stimulates histamine and creates a deep hyperemia
- Used to assess tight and tender areas that need to be addressed

Cautions and Contraindication of Rhythmic Compression

- Should not be applied over any joint or bone projections
- Applied only to muscle belly with caution over facial divisions
- Cautious about the rate at which depth is added
- Post-event massage, pace must be moderate to avoid pain or cramping in muscle that are fatigued and sore
- Not recommended in most treatment massage plans, especially during acute and sub-acute phases

Active Assistive Techniques


- AKA – active release technique, active myofascial release, osteokinematics, soft tissue release, and muscle release technique
- Combines friction stroke with active muscle contraction
- Two Types
 - Active Assistive Broadening
 - Active Assistive Lengthening

Active Assistive Broadening

Muscle starts in neutral or lengthen position



Start at either the proximal or distal end of the muscle belly




Instruct athlete to slowly and actively shorten the muscle belly while Therapist applies down and out pressure across the muscle fibers (Intensifies the broadening action)

Active Assistive Lengthening

Muscle Starts in Shorten position



Hands positioned at distal end of muscle belly



Instruct athlete to slowly and actively lengthen the muscle while Therapist applies linear friction parallel to normal muscle fibers

Cautions and Contraindication of Active Assistive Techniques (AAT)

- AAT is contraindicated of acute muscle strain until the maturation stage of healing
- Dry application could be to intense for event massage

Static

Gradual

Stretching
and Range of
Motion

Proprioceptive
Neuromuscular
Facilitation (PNF)

Post-Isometric
Relaxation (PIR)

Stretching and Range of Motion

- Intention is to return muscles to their normal length after reducing muscle tension and connective tissue restrictions



Purpose/effects of Sports Massage Strokes

- Assessment and Preparation of work
 - Effleurage
 - Pétrissage
 - Rhythmic Compression
- Improve Local circulation (venous flow)
 - Effleurage
 - Linear friction
- Create Hyperemia
 - Rhythmic compression
 - Friction
 - Active assistive release

Purpose/effects of Sports Massage Strokes (cont.)

- Stretch and broaden
 - Friction
 - Active assistive release
 - Stretching (Static or facilitated)
- Reduced muscle tension/muscle relaxation
 - Pétrissage
 - Jostling
 - Prolong tapotement
- Improve Muscle tone
 - Pétrissage (rapid)
 - tapotement
 - Active assistive release