The Art of Massage

According to John Harvey Kellogg

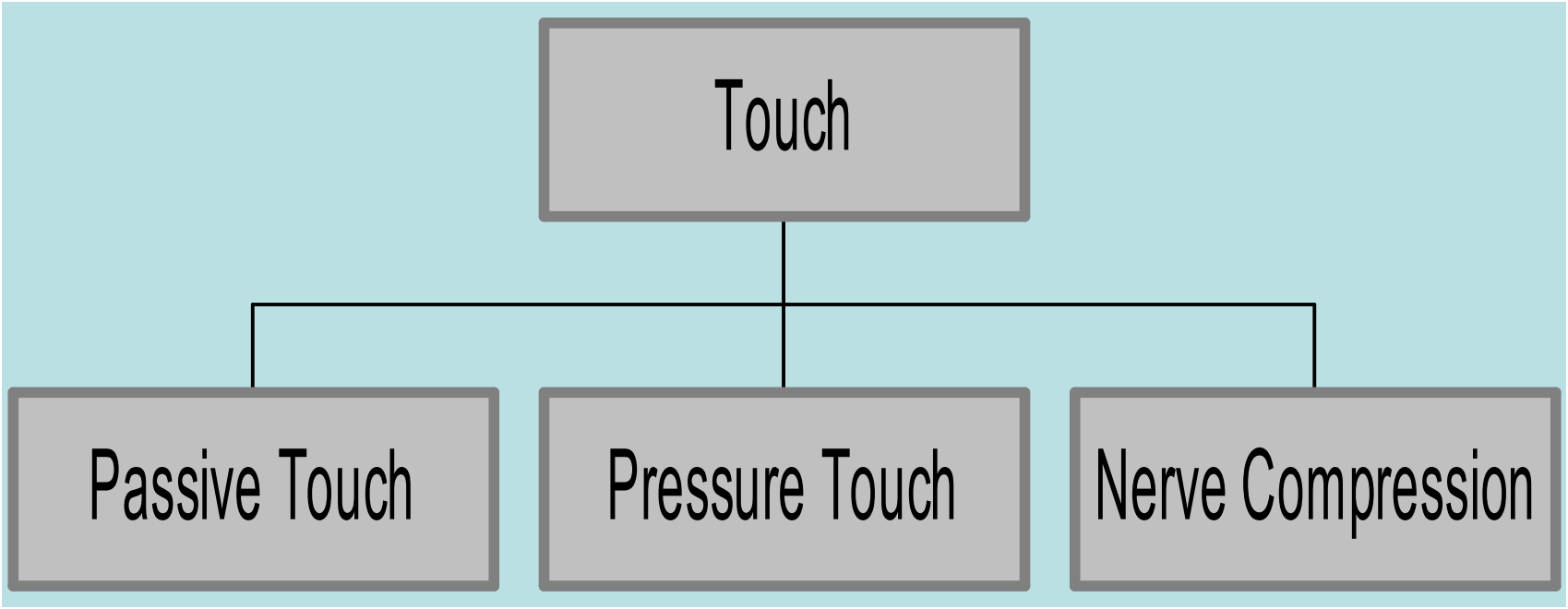
Presentation created by Diane Fisher, LMT

Seven Procedures of Massage

- Touch
- Stroking
- Friction
- Kneading
- Vibration
- Percussion
- Joint Movement

Touch

**The touch of massage is a skilled or professional touch,
applied with intelligence, control, and a purpose.
It is simple, but capable of producing decided physiological effects.**



Passive Touch

Type	Passive
Application	Lightly touching the part with one or more fingers, the whole hand or both hands
Location	Anywhere
Physiological Effects	1.Elevation of temperature 2.Hypnotic Effect 3.Electrical Effect
Therapeutic Applications	• Hyperaesthesias, esp. head and joints • Numbness, tingling, other sensations disappear • Pain lessened and sleeplessness relieved • Nervous irritability quieted
Contra-Indications	

Pressure Touch

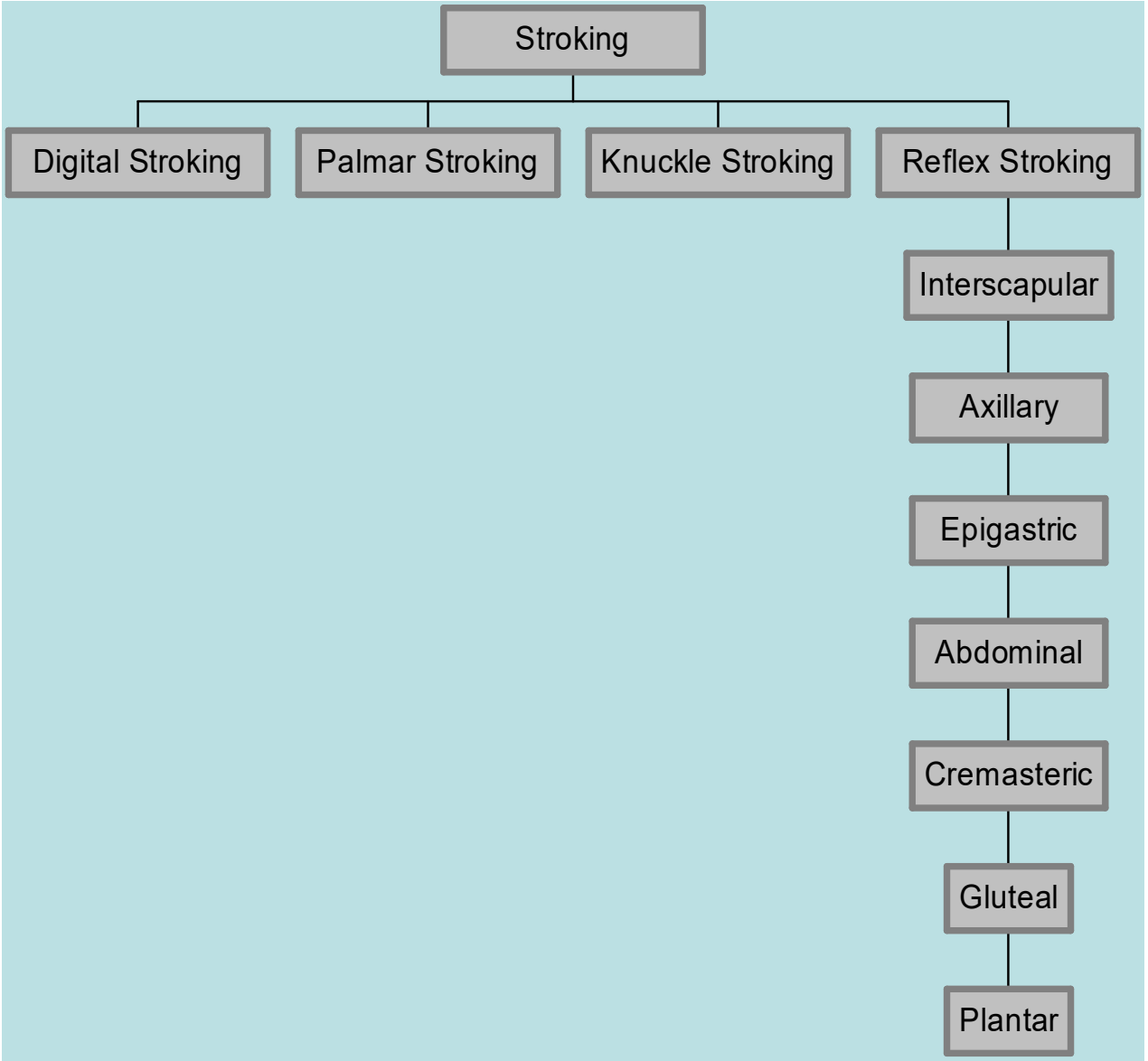
Type	Pressure
Application	Making light or heavy pressure with the whole of one or both hands or with one or more fingers
Location	Head, joint, some swollen or irritated part or any portion of the body
Physiological Effects	Diminish swelling an congestion (thus pain) by emptying blood vessels and benumbing nerves
Therapeutic Applications	• Relieve pain • Lessens headache • Relieves toothache
Contra-Indications	

Nerve Compression

Type	Nerve Compression
Application	Strong pressure made upon a nerve trunk at some point in its course
Location	Motor points – on surface where large trunks are readily accessible. Spinal nerves on either side of spine. Abdominal sympathetic – lumbar ganglia or subumbilical ganglion
Physiological Effects	1.Light pressure on nerve trunks stimulates 2.Firm, deep, continued pressure numbs and may even paralyze nerve trunk or sedates
Therapeutic Applications	• Sciatica-stimulate-directly to affected nerves- pressure along junction of sacrum and illium and sciatic dimple • Paralysis – stimulate • Arousing activities of nerve centers • Stimulate spine – thumbs between spinous processes • Facial neuralgia – seat of pain or motor point of affected nerve • Intercostal neuralgia – seat of pain, pressure on lower border of upper rib • Crural neuralgia – directly to affected nerve
Contra-Indications	Too much pressure at first on abdominal sympathetic may produce nausea, faintness, even prolonged pain

Stroking

Simply touch combined with motion.
Tips of fingers or entire palmer surfaces of one or both hands are moved gently over the skin with light contact.
Keep your wrist flexible, movement even and slow, and perfectly uniform in relation to pressure and speed.
Not more than 1-2 inches per second. Move in one direction only, following arterial blood flow or direction of hair.
The purpose is to diminish blood supply.



Digital Stroking

Type	Digital
Application	Tip of one or more fingers. Fingers held slightly apart, a little curved and flexible so that all fingers fall lightly in contact with the surface.
Location	Primarily on forehead and spine.
Physiological Effects	1.Sedative if done in direction of arterial blood flow 2.Reduces blood supply. 3.Can be very sedative and quieting to cutaneous nerves.
Therapeutic Applications	• Gentle stroking of the forehead/feet can relieve sleeplessness • Hypnotic stroking of the forehead • Use to lessen an excessive degree of cutaneous congestion or stimulation, esp. around a joint • Relieves hypersensitiveness, even with inflammation • Gentle stoking of the head for nervous headache

Palmar Stroking

Type	Palmer
Application	Palmer surface of one or both hands
Location	Broad, fleshy parts. Joints Soles
Physiological Effects	1. Sedative in done in direction of arterial blood flow. 2. Reduces blood supply 3. Can be very sedative and quieting to cutaneous nerves.
Therapeutic Applications	• Gentle stroking of the forehead/feet can relieve sleeplessness • Hypnotic stroking of the forehead • Use to lessen an excessive degree of cutaneous congestion or stimulation, esp. around a joint • Relieves hypersensitiveness, even with inflammation • Gentle stoking of the head for nervous headache

Knuckle Stroking

Type	Knuckle
Application	Hand is closed and knuckles of second joints of the fingers are applied to the surface.
Location	Seldom used, except in massage of the back
Physiological Effects	1.Stimulating 2.Excites the posterior branches of the spinal nerves and stimulates the spinal centers
Therapeutic Applications	

Stroking

Direction of strokes:				
Head	Center of forehead backward or vertex downward		**Back**	Shoulders downward or median line outward
Chest	Sides toward median line		**Abdomen**	Upper- sides in and up Middle-toward median line Lower- upward and inward
Arms	Shoulders to hands		**Legs**	Hips to feet
			Feet	Toes toward heel

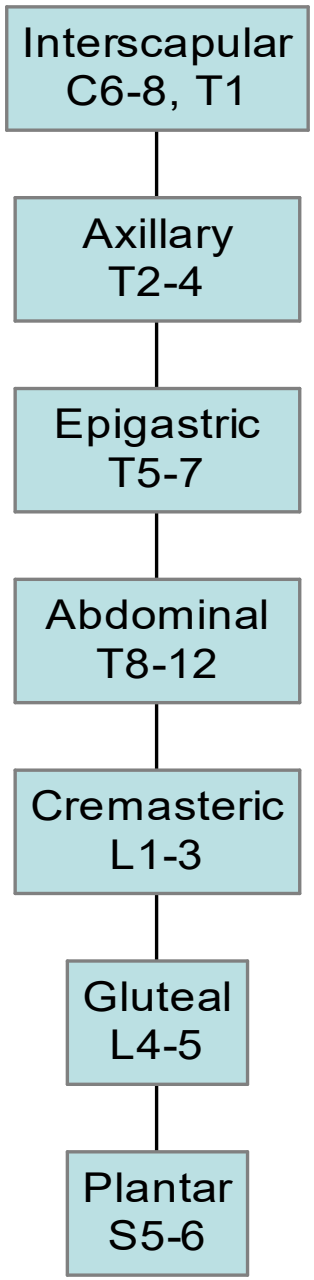
Reflex Stroking

Gentle stroking with the fingernail, end of a lead pencil, wooden toothpick, or head of a pin applied to the reflex areas.

Reflex areas develop cutaneous (skin) reflexes. Cold excites the reflex.

Reflex stroking produces muscular contraction as a result of the formation of a reflex arc through the spinal cord. It affects the cutaneous nerves, muscles nerve centers and related internal organs.

It is a most powerful means of stimulating the centers of the spinal cord.



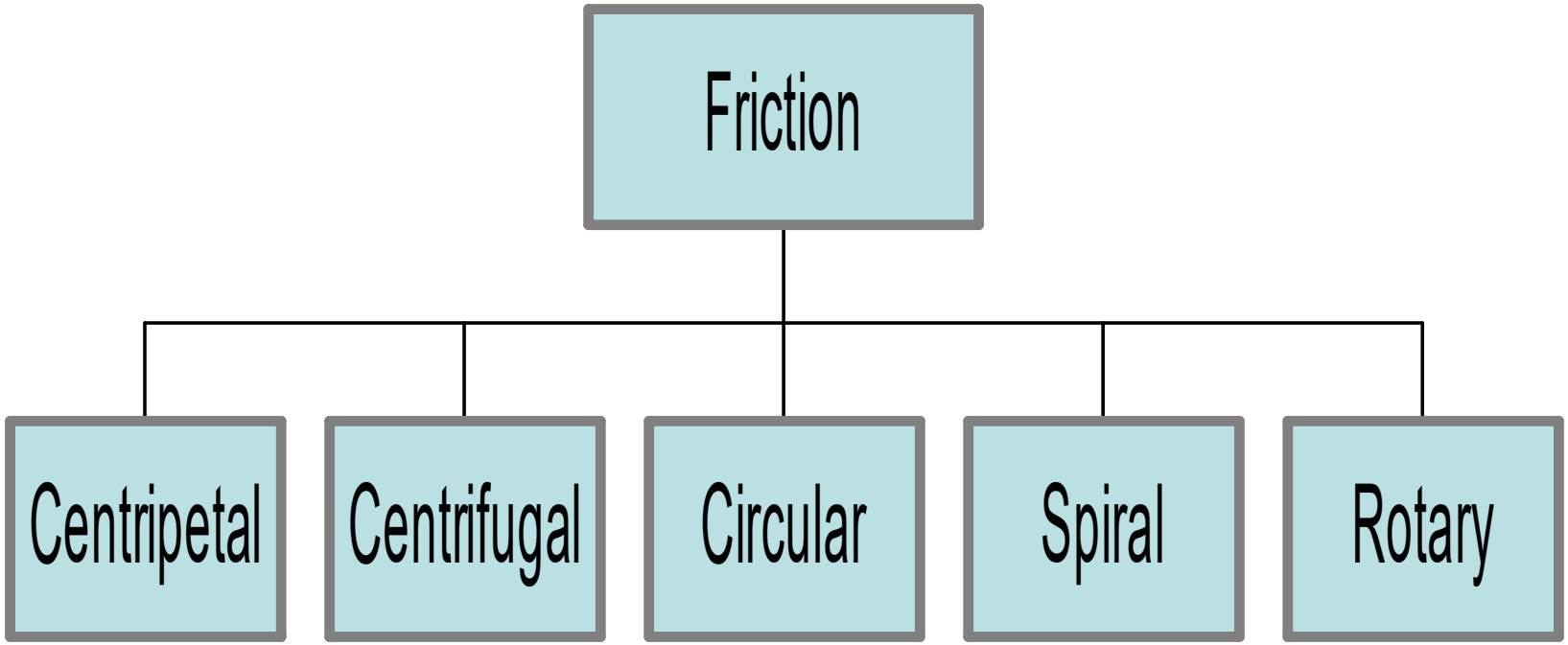
Reflex Stroking

Name	Location	Physiological Effects	Therapeutic Applications
Interscapular	Between the shoulder blades	C6-8, T1	Spinal anemia
Axillary	Armpit	T2-4	Nothing stated
Epigastric	Between ribs 4-6 on sides of chest	T5-7	Hypopepsia and motor insuffiencicency of the stomach
Abdominal	Mammary line	T8-12	Constipation, relaxed condition of the abdominal muscles. Should always be used with abdominal massage.
Cremasteric	Upper and inner thigh	L1-3	Loss of tone to rectum or bladder, or weakness in any genito-urinary functions.
Gluteal	Overlying gluteal muscles	L4-5	Loss of tone to rectum or bladder, or weakness in any genito-urinary functions.
Plantar	Sole of foot	S5-6	Improve innervation of the muscles to the lower extremities

Friction

- Part or the entire palmer surface of the hand is moved over the surface with a considerable degree of pressure—the amount varying in different parts: heavy over thick, fleshy masses and light over bony surfaces and thin tissues. Never so much pressure that the hand does not slip readily over the surface or interferes with the movement of the blood in the arteries.
- The principal effect of friction is upon the superficial veins, the large venous trunks, and the lymph spaces and vessels. Rate of movement varies according to the length of the stroke and varies from 30-180 strokes per minute. Direction of movement varies depending on the part operated on. Generally follow the large veins, applying firm pressure with the thumbs esp. on the extremities.
- Pressure should always be uniform for the part, but individually graduated. Some lubricant should be used. Fine Vaseline, coconut oil, cocoa butter and talcum powder are the best lubricants.
- Friction is applicable to all parts of the body, but especially useful to the limbs, head and neck. It should always be used in the beginning if the surface is cold.
- Principal objective is to empty the veins and lymph spaces and channels, thus encouraging the circulation. This encourages the vital exchanges and frees wastes.

Five Types of Friction



Friction

Type	Centripetal	Centrifugal	Circular	Spiral	Rotary
Application	Movement in direction of venous blood flow	Movement in direction of arterial blood flow	Limb is grasped by both hands, which make an alternate wringing or twisting movement. Distal to proximal	One hand using a spiral movement Distal to proximal	Hands move over a broad surface in an elliptical, circular, or semicircular direction. One hand may support the tissues while the other hand executes the movements.
Location	Chiefly applicable to the extremities	Any	Extremities	Extremities	Esp. applicable to fleshy areas such as hip and back above the spines of the scapula
Therapeutic Application	• Promotes absorption • Increases activity of the circulation • Anemia of the brain	•Sedative and derivative effects on the viscera and nerve centers • Decreases vascular activity •Cerebral congestion • Friction on extremities for cerebral congestion and resulting insomnia			

Friction

Physiological Effects	Therapeutic Applications
1. Reflex effects on the vasomotor centers	• Good for defective peripheral circulation • Good for impaired skin activity; Hidebound skin. • Dingy, tawny, jaundiced, cold or inactive skin.
2. Mechanical aid to the movement of fluid in the veins and lymph spaces and channels	• Encourages phagocytosis, good for treatment of inflammatory exudates (usually around injured joints). Alternate worki ng on part and derivatively. • Promoting absorption- general dropsy, local swelling due to inflammation or mechanically caused congestion. • Sprains, chronic joint enlargements, sciatica, rheumatism, gout, glandular enlargements
3. Powerful derivative effects.	• Inflamed joints, painful sprains, pelvic pains, insomnia and local congestion • Local inflammation needs only derivative friction • Derivative work causes blood to go around an inflamed joint or muscle instead of through it • Friction lower back for pelvic pain • Friction spine to relieve headache
• Reflex or stimulating effects may be increased by using no lubricant; BUT 2-5 or 5-8 minutes is the longest to apply friction without lubricant • Dry skin becomes moist and oily; Promotes development of hair • Increase moisture thrown off by 60% and heat dissipation by 95%. Temperature of skin is raised by increased blood at the surface and by an increased production of heat.	

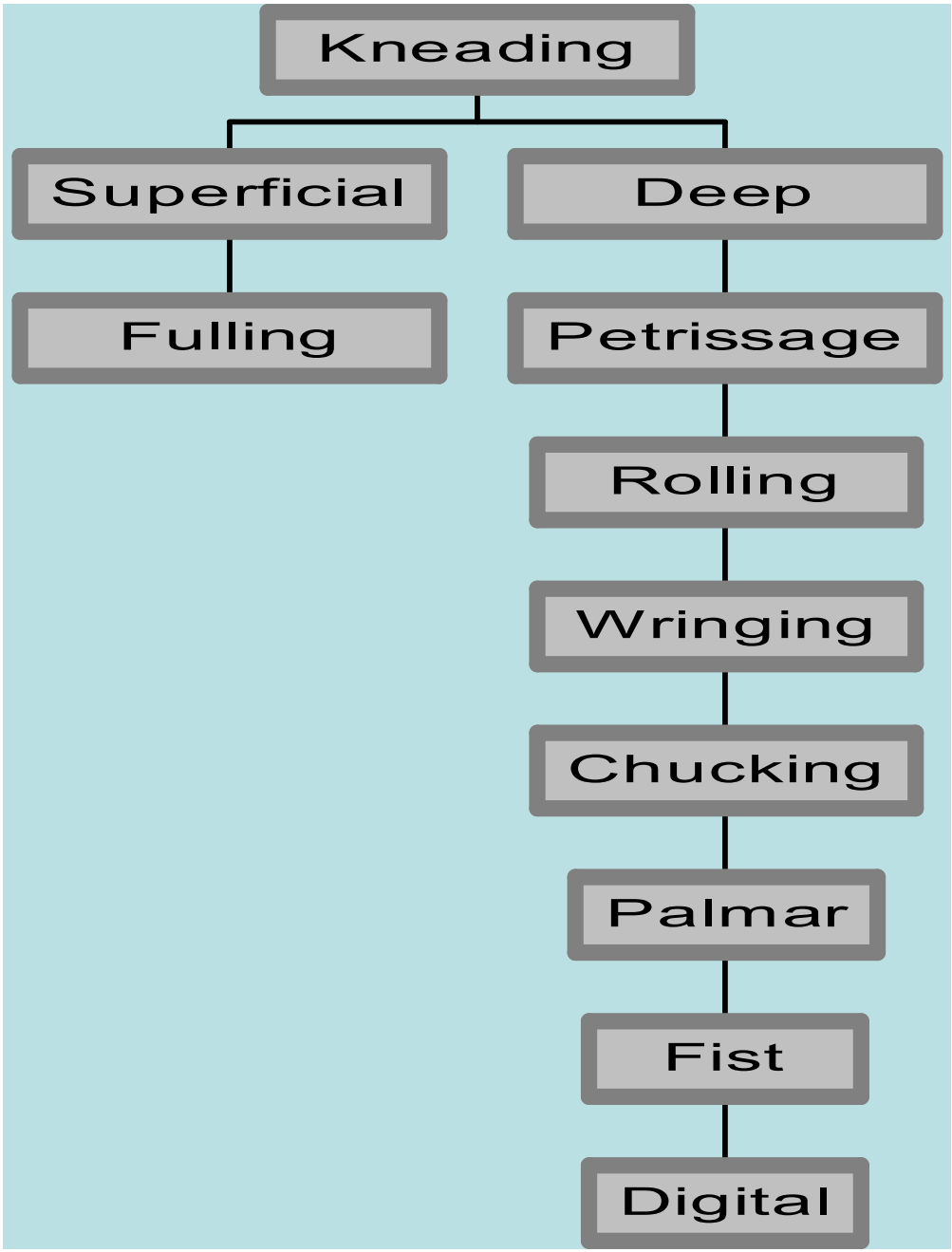
Direction of Friction

Head	Neck	Chest	Arm & Leg	Abdomen	Back	Hips
Center of forehead backward or vertex downward	Downward	From sternum to axilla	Distal to proximal	**Upper**- downward and outward **Middle**- from median line outward **Lower**- median line downward and outward	**Circular** above shoulder blades. **Down** from shoulder blades to sacrum. From sides to spine (**lateral to medial**) in loin region.	Circular

Kneading

- Alternate, intermittent compression of the tissues by grasping them or compressing them against the underlying bone surfaces. To “knead” as a baker kneads dough. Hand does not slip against the skin.
- Deep kneading acts upon the muscles. No other procedure requires as much skill, direction and anatomical knowledge. Little pressure is used on thin tissues; greater pressure on think, firm tissues. Tolerance for pressure is established by prolonged treatment.

Types of Kneading



Superficial Kneading

Type	Fulling
Application	Skin is grasped between thumb & fingers, lifted from underlying bone or muscle; released when strain is greatest Any direction
Location	Skin and loose cellular tissue underneath it

Deep Kneading

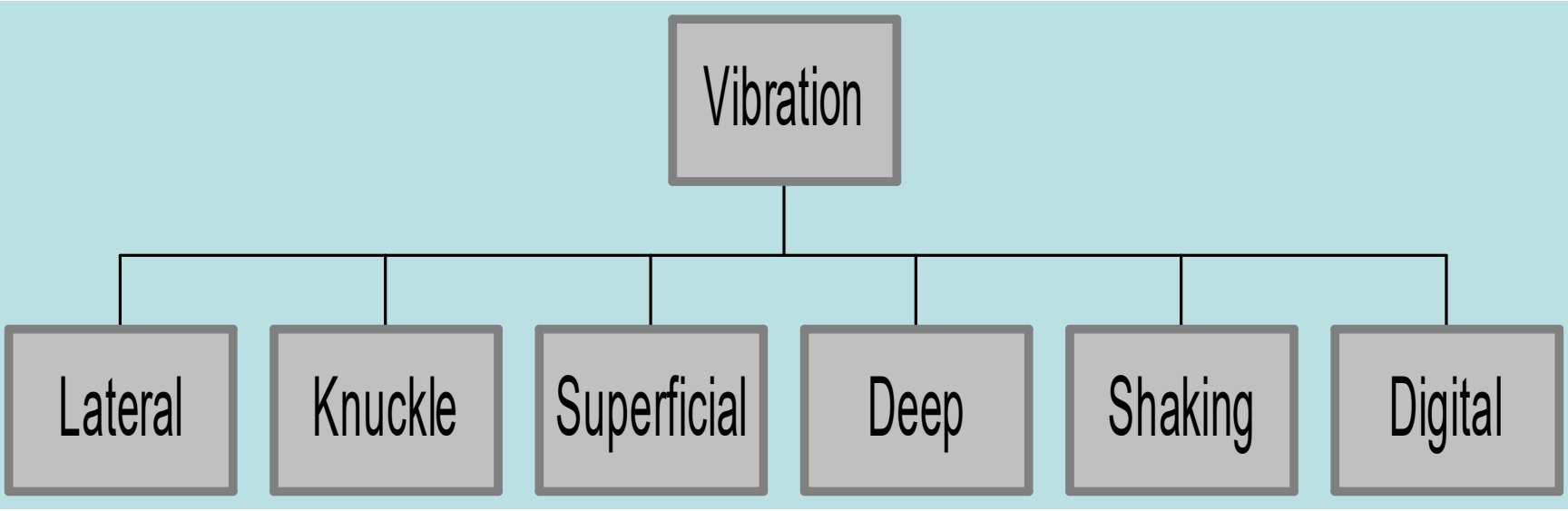
Type	Petrissage	Rolling	Wringing	Chucking	Palmar	Fist	Digital
Application	Thenar eminance and palmer surface of hand are used to spread force over large surfaces. The muscle is compressed, lifted, rolled, stretched from insertion point. Release when strain is at a maximum. 30-90/minute	Tissues are compressed against the deeper lying structures and rolled in a to- and fro- movement. Use one or both hands. 200-400/minute Proximal to distal	Grasp the limb with two hands on opposite sides and close together, then wring or twist in the same direction or alternate in the opposite direction <30/minute Proximal to distal	Support the limb with one hand, other hand grasps the fleshy portion and drags it up and down along the long axis of the limb. Cover the entire limb.	Using the heel of the hand, or the whole palmar surface, press firmly on the tissues	Compression of abdominal tissues by the knuckles of the closed fist	Compression of abdominal tissues by the knuckles of the closed fist
Location	Anywhere, but work on individual muscles	Esp. on upper portion of back, hips, arms and legs	Extremities	Anywhere, esp. on rigid or contracted muscles	Esp. applicable to back, chest and abdomen	Ends of the fingers	Ends of the fingers

Kneading

	Superficial	Deep
Therapeutic Applications	Impaired skin function Jaundice Dry skin Hidebound skin	•Weak muscles increase size and firmness, valuable in paralysis and paresis and in all cases of tissue weakness and relaxation •Enlarged, stiffened and painful joints return to a normal condition, and inflammatory exudates are broken down and absorbed •Valuable in the treatment of muscular and joint rheumatism, sciatica, various forms of neuralgia, general defective development, neurasthenia, writer's cramp, convulsive tic, locomotor ataxia, various forms of chronic spinal disease, and in the opening of closed blood and lymph channels •Great value in the treatment of sprains and fractures
Physiological Effects	Empties and refills blood vessels, lymph spaces and channels	•Stimulates all vital activities of the body part •Blood & lymph vessels emptied and fresh supply flows in •Dilates & quickens activity of the blood vessels from reflex effects •Most effective of all for producing alternative effects and general vital renovation •Parts redden & temperature increases from increased blood

Vibration

A fine, vibratory or shaking movement communicated to the body; created by one or both hands.
Can also occur with the use of a mechanical device.



Vibration

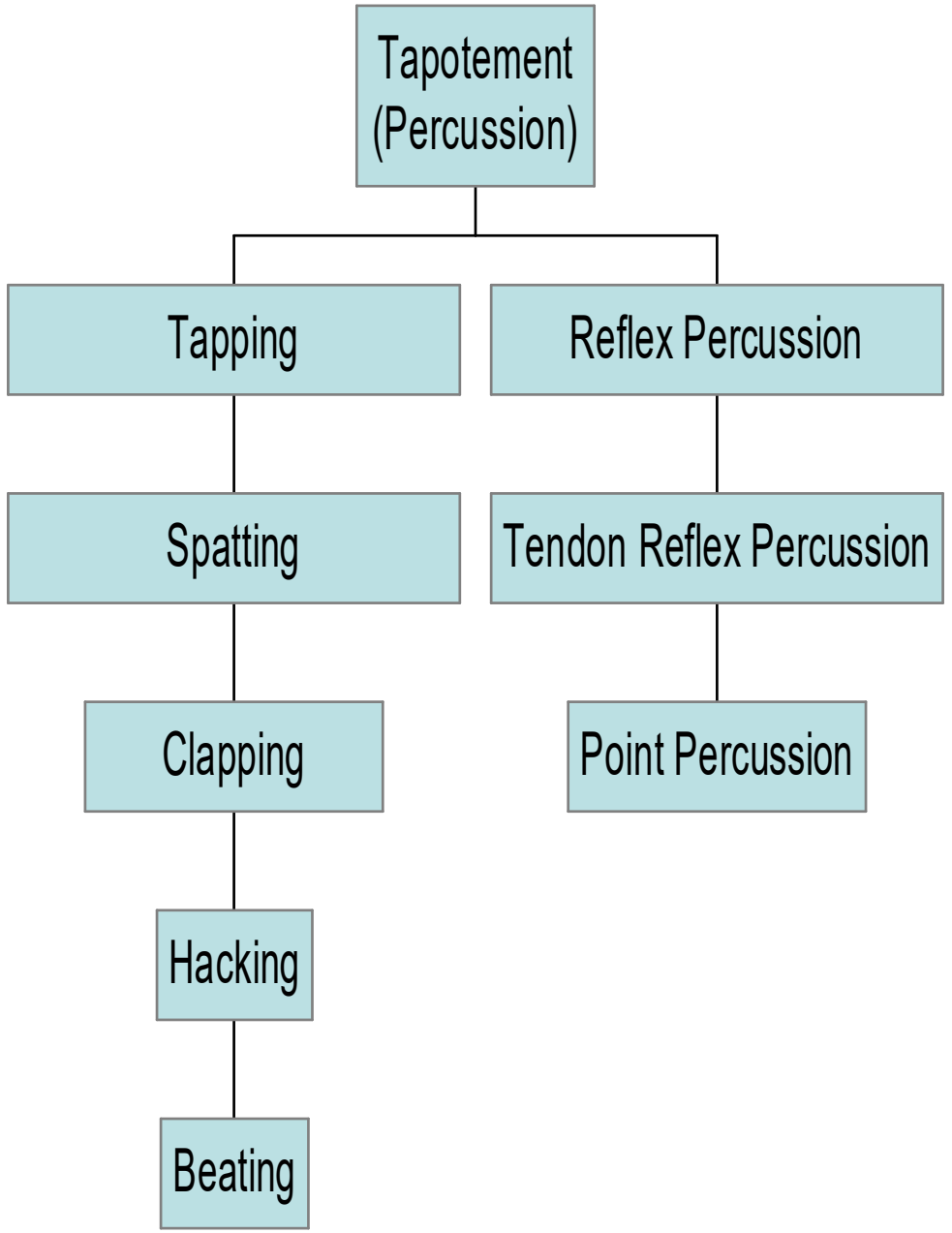
Type	Lateral	Knuckle	Superficial	Deep	Shaking	Digital
Application	Palmar surface of hand, moving to- and fro- without slipping over skin	Knuckles of closed hand placed in contact with skin and moved slowly over surface with a vigorous vibratory movement	One or both palms are placed on surface, move lightly and slowly over surface with a fine trembling movement	Palm of hand or closed fist placed firmly on surface with arm held straight and a fine jarring or trembling movement with flexor/extensor muscles	Part is grasped firmly by both hands and shaken with a small but rapid vibratory movement	End of thumb or one or more fingers is placed on the part and arm is thrown into violent vibration
Rate	6-10/second					
Location	Fingertips for head and joints	Back	Anywhere	Deepest organs or tissues	Mainly head or extremities	Anywhere

Vibration

Physiological Effects	Therapeutic Applications	Contra-Indications
•Stimulation •Deep vibration acts forcibly on the most deeply seated organs •Muscular contraction, even tetanus •Pleasant, tingling sensations •Activity of circulation increases, blood vessels dilate, temperature of part increases, pleasurable glow & sensation of well-being pervades Profound effects produced by vibration to nerve trunks and nerve centers	•When stimulation is required •Paresis and paralysis •Applied to nerve trunks - valuable to neuralgia, neurasthenia and most functional nerve disorders accompanied by diminished activity •Applied to spinal column – scoliosis and other degenerative affections of the spinal cord. Relieves violent trembling of spinal sclerosis Applied to extremities – most excellent means of relieving coldness due to motor spasm of the small vessels due to vasomotor disturbances, numbness, tingling and various other morbid sensations	Marked hyperaesthesia, acute inflammation, febrile action, morbid growths, suppuration, other morbid processes

Percussion

Stimulating procedure performed by administering elastic blows with both hands, used in alternation, to strike the body transversely to the muscles.



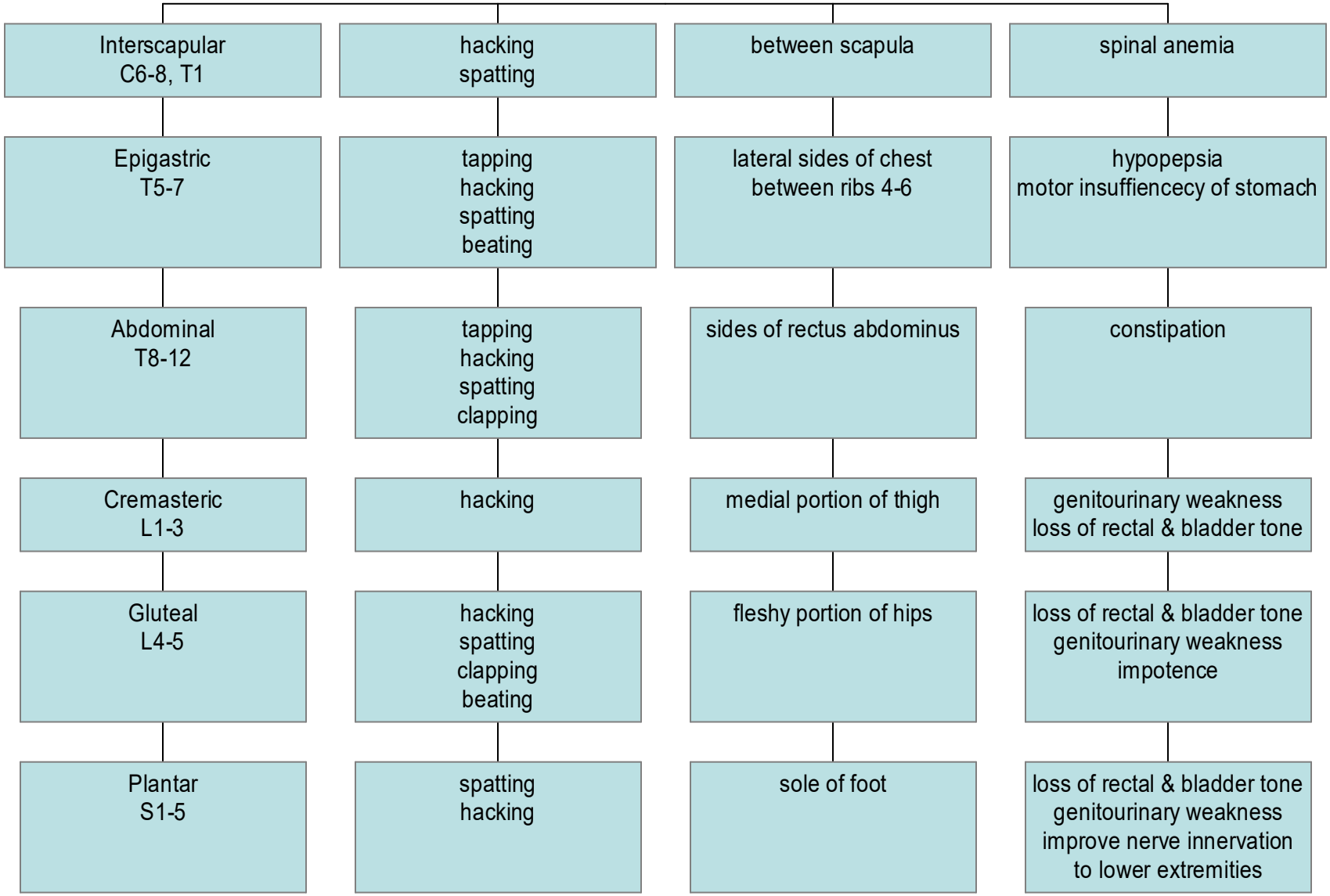
Percussion

Type	Tapping	Spatting	Clapping (Cupping)	Hacking	Beating
Application	Tips of one to or more fingers of one or both hands	Palmar surface of the extended fingers held rigid	Whole hand is used with palmar surface cupped to entrap air that “explodes” out as it comes in contact with skin	Ulnar border of hand comes in contact with skin. Fingers held slightly apart, so they successively come in contact by force of blow	Body is struck with palmar surface of half-closed fist and the dorsal surface of the distal phalanges of the fingers
Location	Head and chest Not extremities	Use first to warm area if surface is cold Most frequently employed to most parts of the body	Fleshy parts where strong surface stimulation is desired	Chest (pleurisy or pneumonia), spine (sclerosis), and head. May be used on any other part as well.	Lower back, fleshy portions of the thighs and sacrum
Contra-Indications	Hyperaestesia	Hyperaestesia	Hyperaestesia	Hyperaestesia	Hyperaestesia

Percussion

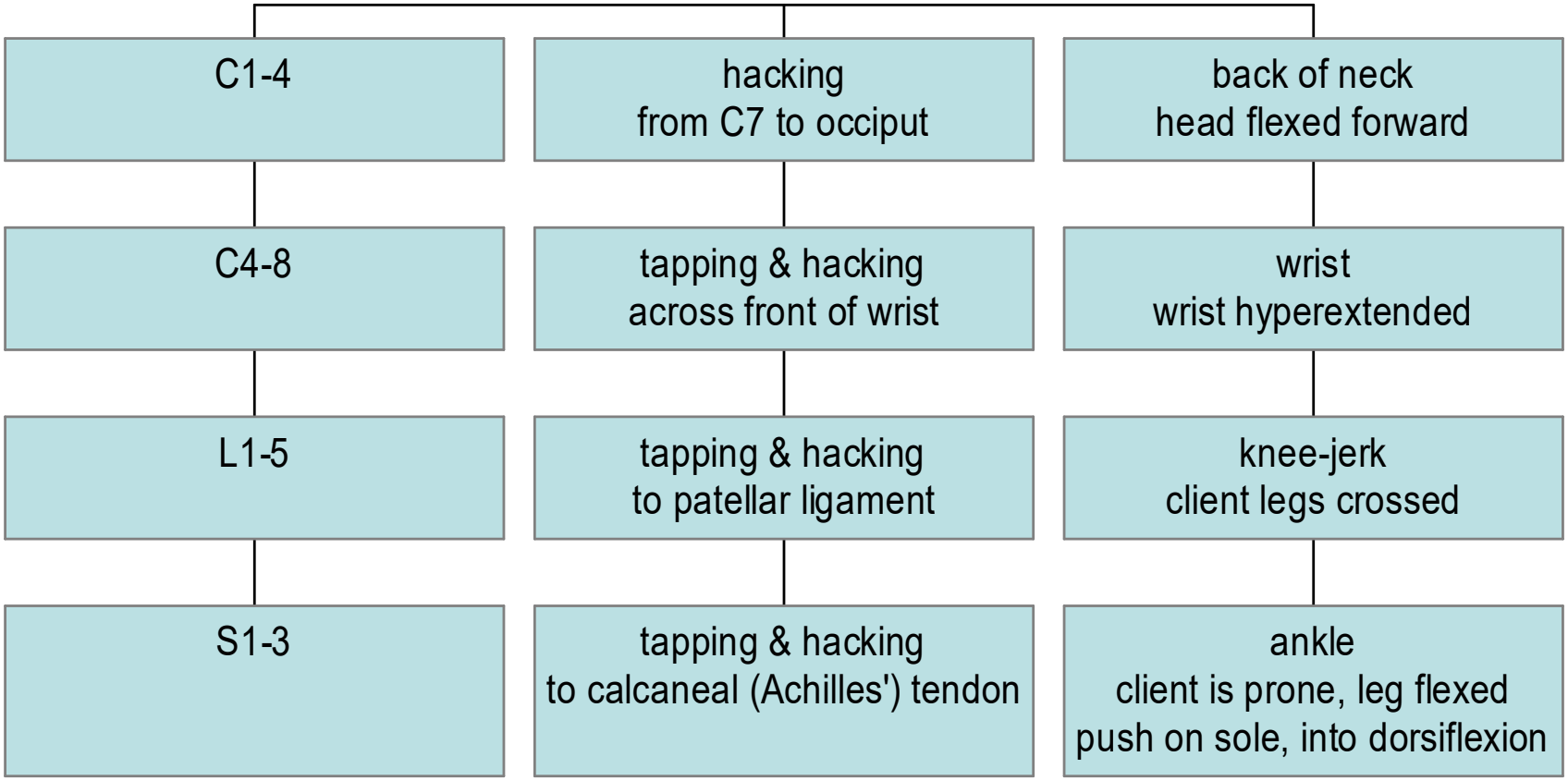
Physiological Effects	Therapeutic Applications
• Powerful excitant upon the skin and tissues beneath it •Short, light application will cause spasm of superficial vessels (pallor of skin) •Faster application: dilation of surface vessels (redness of skin) •May result in paresis of blood vessels •Stimulates nerve centers of all segments of spinal cord (especially lumbar and sacral) •Stimulates vasomotor centers •Hacking and beating especially effective for deep seated structures (influence functions of all viscera of trunk) •Point percussion: powerful motor effects	•Used (especially spatting and clapping) in conjunction with hydrotherapy •Direct and derivative stimulation of skin (good for functional inactivity of skin, i.e. jaundice) •Favorable influences: sciatica, lumbago, coldness in the extremities, passive congestion of the liver and spleen, constipation •Beating: valuable in atony (lack of tone) of bladder and impotence •Hacking on spine for sclerosis •Hacking on chest for pneumonia, chronic pleurisy, and to promote absorption in pleural cavity

Reflex Percussion



Tendon Reflex Percussion

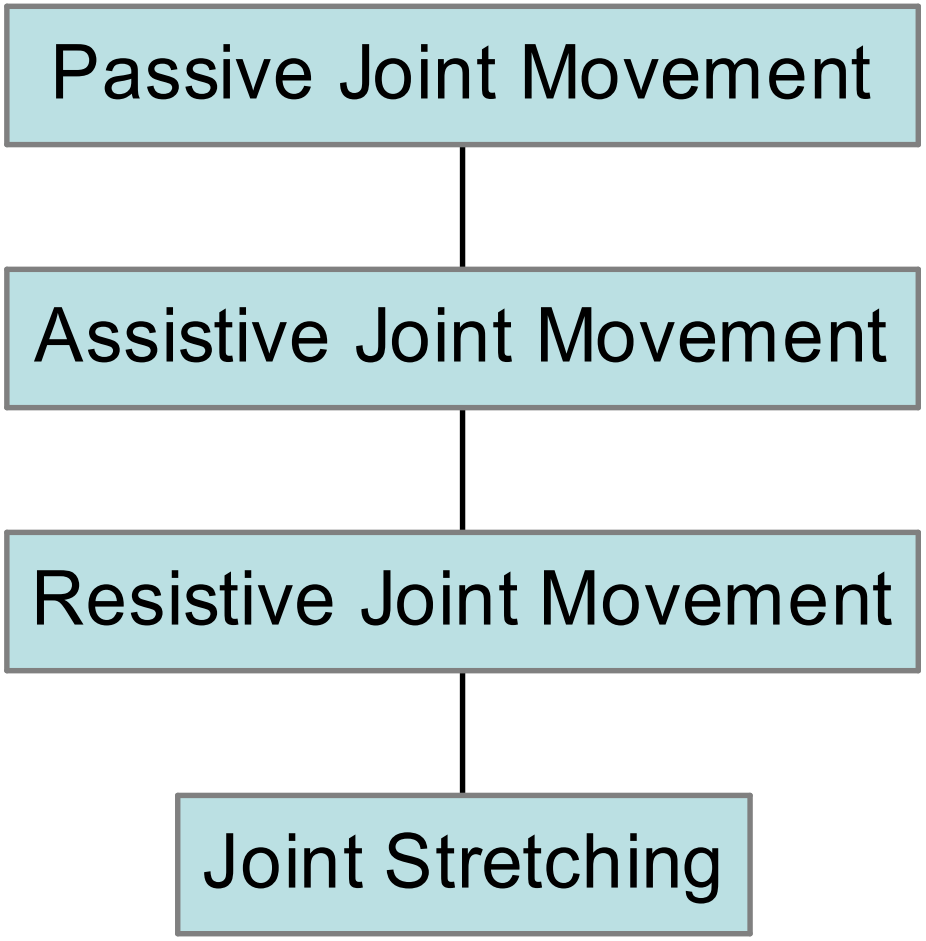
For best results, place the muscle on stretch, divert the client's attention, and apply blow directly to tendon of muscle that is tense to cause muscle contraction.



Point Percussion

How	Place one finger on motor point, press firmly and perform hacking or tapping on finger with other hand.
Where	Motor points, located where large (PNS) nerves are readily accessible just beneath the skin.
Why	*Physiological Effects*: effective means of producing muscular contractions (reflex effect) *Therapeutic Application*: weak muscles

Joint Movements are performed in four different ways



Eight Principle Movements

Abduction = away from midline

Adduction = toward midline

Circumduction = distal end of bone describes a circle

Extension = angle is increased

Flexion = angle is decreased

Pronation = palm is posteriorly positioned

Supination = palm is anteriorly positioned

Joint Stretching = series of vigorous, elastic pulls

Passive Joint Movement

- Simple motion of the joint (articulation) effected wholly by the practitioner, with no effort on the part of the patient
- Effects the joint and surrounding structures
- Extent of movement should be sufficient enough to produce a distinct feeling of resistance

Assistive Joint Movement

- Movement initiated by patient, with assistance of practitioner
- Used in the case of great feebleness
- Effects the joint and surrounding structures, as well as the muscles being used
- Extent of movement should allow time for patient to move the joint, to help build their confidence

Resistive Joint Movement

- Movement may be initiated by patient, practitioner, or both together
- Effects the joint and surrounding structures, as well as the muscles being used
- Extent of movement should be carefully regulated. Resistance should be slight at first, then gradually increased, then diminished again to complete movement.
- This should not result in soreness or pain

Joint Stretching

- Powerful means of stimulating the nutrition of the joint
- Effects the joint and surrounding structures, as well as the muscles being used
- A series of vigorous, elastic pulls are made
- Force should be applied gradually at first, then withdrawn rather suddenly
- Force should be intermittent, not continuous, each pull lasting 3-5 seconds

Joint Movements

Physiological Effects	Therapeutic Applications
Derivative effects: very powerful • Increases nutrition to the general area • Increases nutrition to the underlying bone • Increases growth of cartilage, ligaments and joint structures • Increases circulation of blood and lymph vessels **Direct effects:** • Keeps articulating surfaces working properly • Increases nutrition to the joint itself leading to hypereamia; due to the increased blood flow (vasodilation) and lymph	• Osteoarthritis (chronic joint disease) • Rheumatism, hyperaesthesia • Rheumatic gout • Chronic synovitis • Fractures and sprains • Stiffening or ankylosis • Prolonged bedrest • Beneficial to everyone

Movements by Area

Shoulder	Elbow	Forearm	Wrist	Fingers	Hip	Knee	Ankle	Toes
Abduction Adduction Circumduction Extension Flexion Rotation	Extension Flexion	Pronation Supination	Abduction Adduction Circumduction Extension Flexion	Abduction Adduction Circumduction Extension Flexion	Abduction Adduction Circumduction Extension Flexion Rotation	Extension Flexion	Abduction (Eversion) Adduction (Inversion) Circumduction Extension (Plantar flexion) Flexion (Dorsiflextion)	Abduction Adduction Circumduction Extension Flexion