

Lecture 3
Principles
of
Massage Therapy

Principles Of Massage Therapy

Massage Routine:

-variety of techniques that transition easily from one to another in several fluid movements to address specific body parts and/or specific conditions.

Principles Of Massage Therapy

These principles describe direction and progression of massage therapy techniques used in massage therapy routine:

- **General – Specific – General**
- **Superficial – Deep – Superficial**
- **Proximal – Distal – Proximal**
- **Peripheral – Central – Peripheral**
- **Treat the antagonist**

General – Specific - General

- Working the larger area – specific area – back to larger area
- Ex. Tx'ing back. Back → upper back/trap/rhomboid focus → general back
- Aims
 - Accustom the C to MT's touch
 - Decrease the chance of kick back pain (*DOMS – delayed onset muscle soreness*)

Superficial – Deep - Superficial

- Refers to the amount of pressure and depth of pressure used.
- Gentle, lighter pressure ->deeper pressure -> gentle, lighter pressure
- Aims
 - Accustom C to MT's touch
 - Aids in C being able to tolerate deep tissue work
 - Helps with circulation in tissue

Proximal – Distal - Proximal

- Refers to limbs, and direction of pressure in relation to the heart
- Close to heart ->away from heart -> close to heart
- Ex. Post leg massage; Hamstrings ->Gastrocs -> Hamstrings
- Directions of pressure towards the heart
- Pressure away from the heart is lighter
- Aims
 - Proximal work relaxes mm's and encourages vasodilation in prox tissue
 - Once moving distally, proximal tissue is now able to handle increased circulation
 - Encourages good circulation and venous return

Peripheral – Central - Peripheral



Peripheral – Central - Peripheral

- Refers to techniques used specifically to treat areas of local injury, scar tissue, or areas of apprehension for the C
- Treat periphery of area -> work closer to affected site -> Periphery
- * several treatments may be necessary
- Aims
 - Make treatment area more tolerable for client
 - Aids in circulation, scar tissue breakdown, removes wastes
 - Helps with P tolerance

Treating the Antagonist

- Relationship between agonist and antagonist allows for skeletal movement
- If you only Tx the agonist, potential sources of dysfunction and the antagonist may be overlooked
- Ex. Hyperkyphosis

Normal
Kyphosis



Hyper
Kyphosis



Forward
Head Posture

Anterior
Chest Wall
Collapse

Loss of Height



Components of Massage Therapy:

- Direction
- Pressure
- Rhythm
- Rate
- Duration
- Part/Applicator
- Mediums



Components Of Massage Therapy

Components of Massage Therapy:

Direction:

Relaxation--centripetal/blood flow

--muscle fiber direction

Remedial --cross-fibre direction

--direction of restriction

Pressure:

Relaxation --light to moderate

Remedial --deep to reach adhesions

Rhythm: --even/smooth movement



Components Of Massage Therapy

Components of Massage Therapy:

Rate:

Relaxing --slower, match respiration

Stimulating --faster application to stimulate

Duration:

--size of area

--pathological condition

--client's tolerance

Part/Applicator

--pads of fingers

--pad of thumb (thenar eminence)

--surface of palm

--elbow

--forearm

Mediums

oils, lotions, gels, powders



Application of Techniques:

- Be mindful of patterns (too much/not enough)
- Position body
- Stabilize body to focus on target area
- Body may be moved
- Force and exertion are gradual and vary with demand

Application of Techniques:

- Purpose to lengthen shortened tissue and stimulate weakened muscles
- Application is slow and purposeful
- Repeat the movement a few times (avoid fatigue)

Massage Therapy Effects

Massage Therapy Effects

Terminology:

- ***Vasodilation:*** Opens (dilates) blood vessels
- ***Vasoconstriction:*** Narrows (constricts) blood vessels
- ***Fascia:*** *connective tissue*; a thin sheath of fibrous tissue enclosing a muscle or other organ
- ***Adhesions:*** fibrous bands of scar tissue that form between internal organs and tissues, joining them together abnormally
- ***Extremities:*** The outermost or farthest point or portion. A bodily limb or appendage. A hand or foot.
- ***Muscular atrophy:*** a decrease in the mass of the muscle; it can be a partial or complete wasting away of muscle

Massage Therapy Effects

Terminology:

- ***ischemia***: is·che·mi·a. an inadequate blood supply to an organ or part of the body, especially the heart muscles.
- ***Peristalsis***: per·i·stal·sis. involuntary constriction and relaxation of muscles of intestine or another canal, creating wavelike movements that push the contents of the canal forward.
- ***axon***: the long threadlike part of a nerve cell along which impulses are conducted from the cell body to other cells.

Massage Therapy Effects

Two types of responses:

- **Reflex response:**

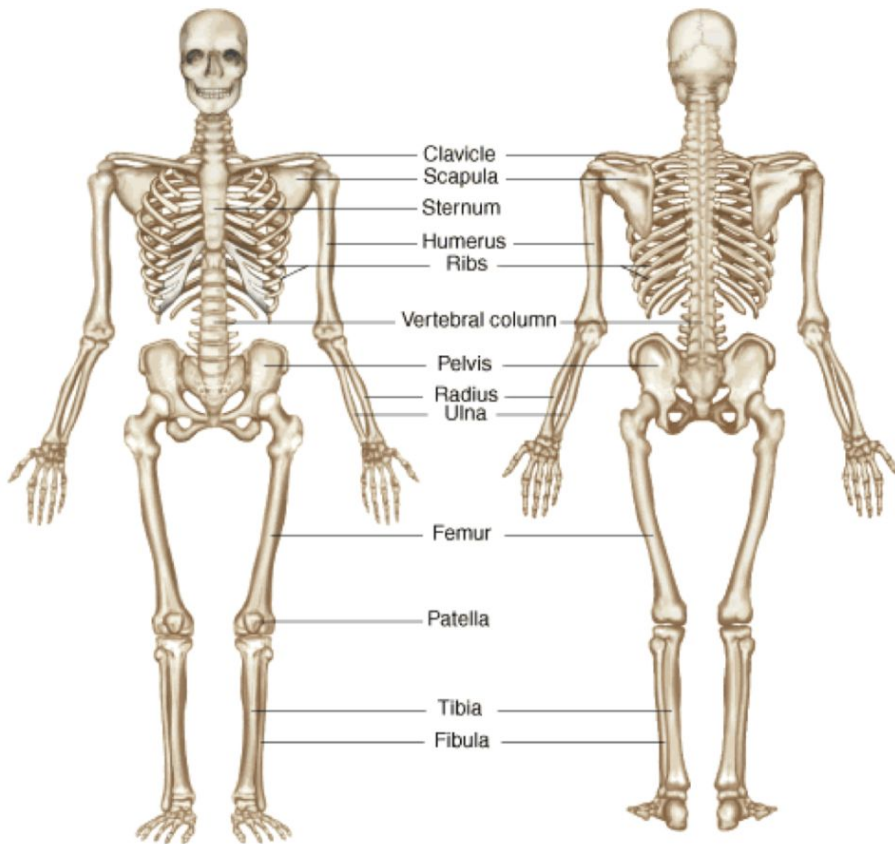
- nerves respond to stimulation

- Parasympathetic Nervous System firing

- **Mechanical response:**

- result of pressure and movement as soft tissues are manipulated

Skeletal System



- Bones
- Cartilage
- Joints

- Provides support
- Protection – rib cage, pelvis, skull
- Movement – mm's attach to bone
- Mineral Storage (Ca)
- Storage of RBC – red marrow

Massage Therapy Effects

Effects on the Skeletal System:

- Improves posture/body alignment
 - Decreases strain on body caused by muscle dysfunction
- Restores range of motion
 - increasing joint movement
 - releasing tight muscles and tendons

Massage Therapy Effects

Effects on the Skeletal System:

- Improves circulation of blood /nutrients to joints

Muscular System



- Skeletal muscle tissue
- Smooth
- Cardiac

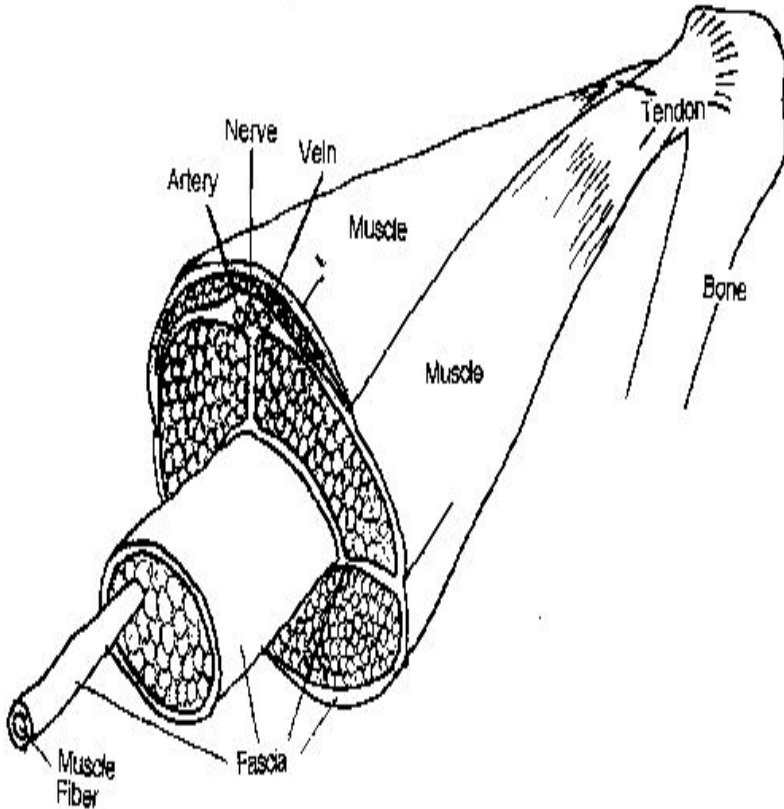
- Movement
- Generate heat

Massage Therapy Effects

Effects on the muscular system:

- Relieves soreness/tension/stiffness
- Improves muscle tone
- Increases flexibility/range of motion

Massage Therapy Effects



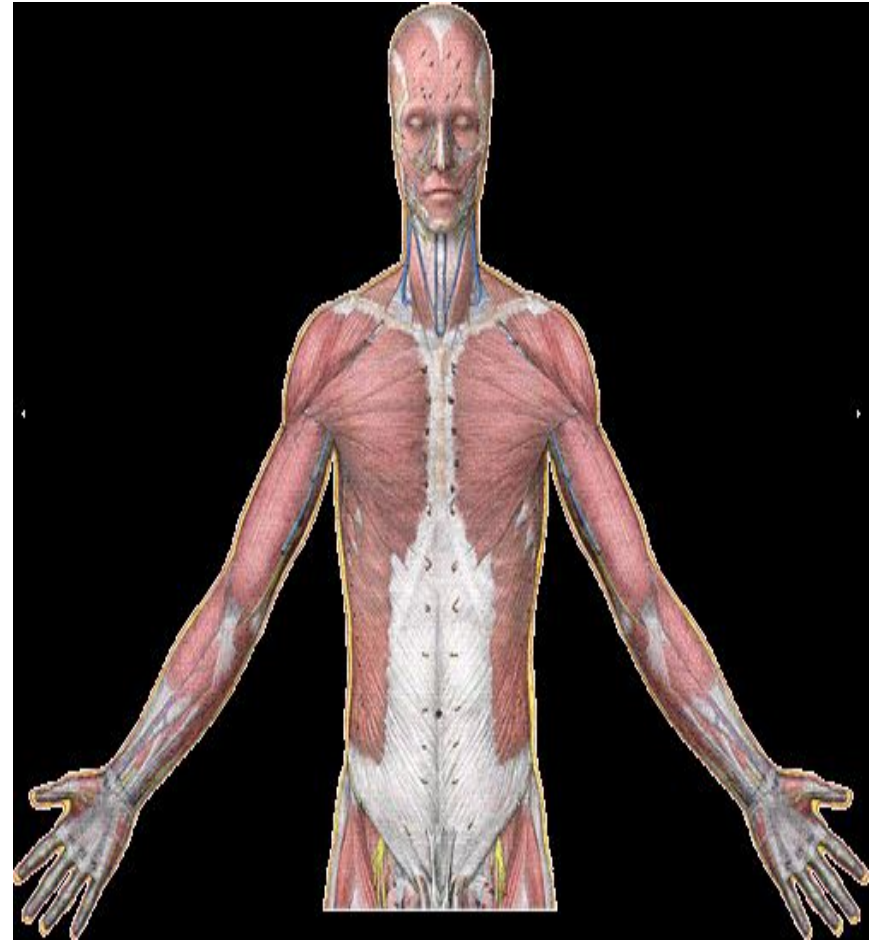
Effects on the muscular system:

- Improves flow of nutrients accelerating recovery from fatigue/injury
- Reduces scar tissue
- Breaks down /prevents adhesions

Massage Therapy Effects

Effects on the muscular system:

- Prevents/delays muscular atrophy from inactivity (injury, age, surgery, illness)
- Increases “physical confidence”
- Relieves cramps/muscle spasms
- Reduces pain/swelling



Cardiovascular System



- Heart
- Blood vessels
- Blood

- Aids distribution of O₂ and nutrients to cells
- Carries CO₂ and waste away from cells
- Regulates body temp

Massage Therapy Effects

Effects on the Cardiovascular system:

- Improves circulation
- Dilates blood vessels (vasodilation)
- Improved delivery of fresh oxygen and nutrients to tissues

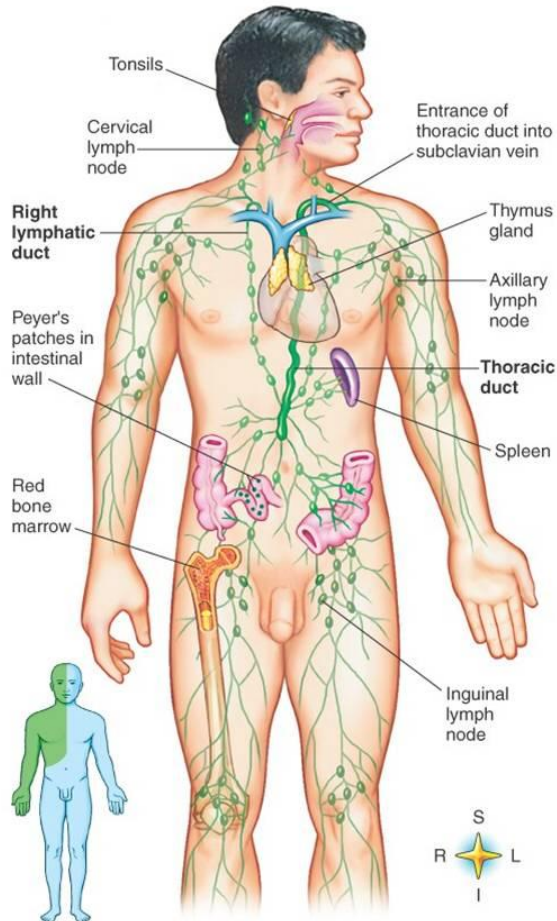
Massage Therapy Effects

Effects on the Cardiovascular system:

- Speeds removal of waste products, toxins and carbon dioxide
- Decreases blood pressure (dilation of capillaries) temporarily
- Decreases heart rate (relaxation)
- Reduces ischemia

Ischemia: reduction in the flow of blood to parts of the body, often marked by pain and local tissue dysfunction) Improves circulation by mechanically assisting venous flow of blood back to the heart
Dilate blood vessels helping them to work more efficiently (vasodilation)
Enhanced blood flow; delivery of fresh oxygen and nutrients to the tissues is improved and the removal of waste products, toxins and carbon dioxide is hastened via the venous system.
Helps temporarily to decrease blood pressure (dilation of capillaries)

Lymphatic System



- Lymph
- Lymph vessels
- Returns proteins and plasma to cardiovascular system
- Helps protect against disease through the production of antibodies

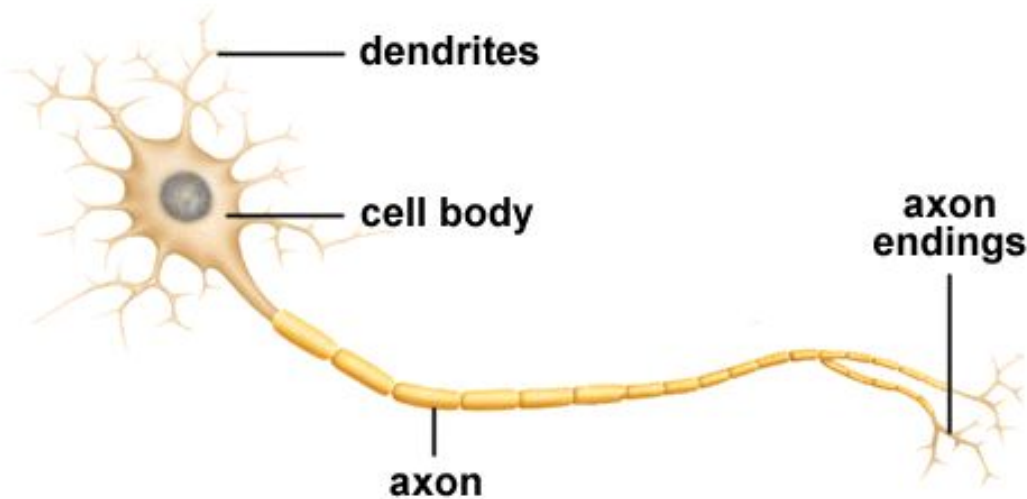
Massage Therapy Effects

Effects on the lymphatic system:

- reduces edema- edema -excess fluid in the tissue by increasing lymphatic drainage and the removal of waste from body systems. may strengthen immune system due to the increase in white blood cell flow
- may strengthen immune system
- Direction of massage should be towards proximal lymph nodes.
- Stimulates sluggish lymphatic vessels, therefore decreasing edema
- Decrease P ass'd with edema

edema -excess fluid in the tissue by increasing lymphatic drainage and the removal of waste from body systems. may strengthen immune system due to the increase in white blood cell flow

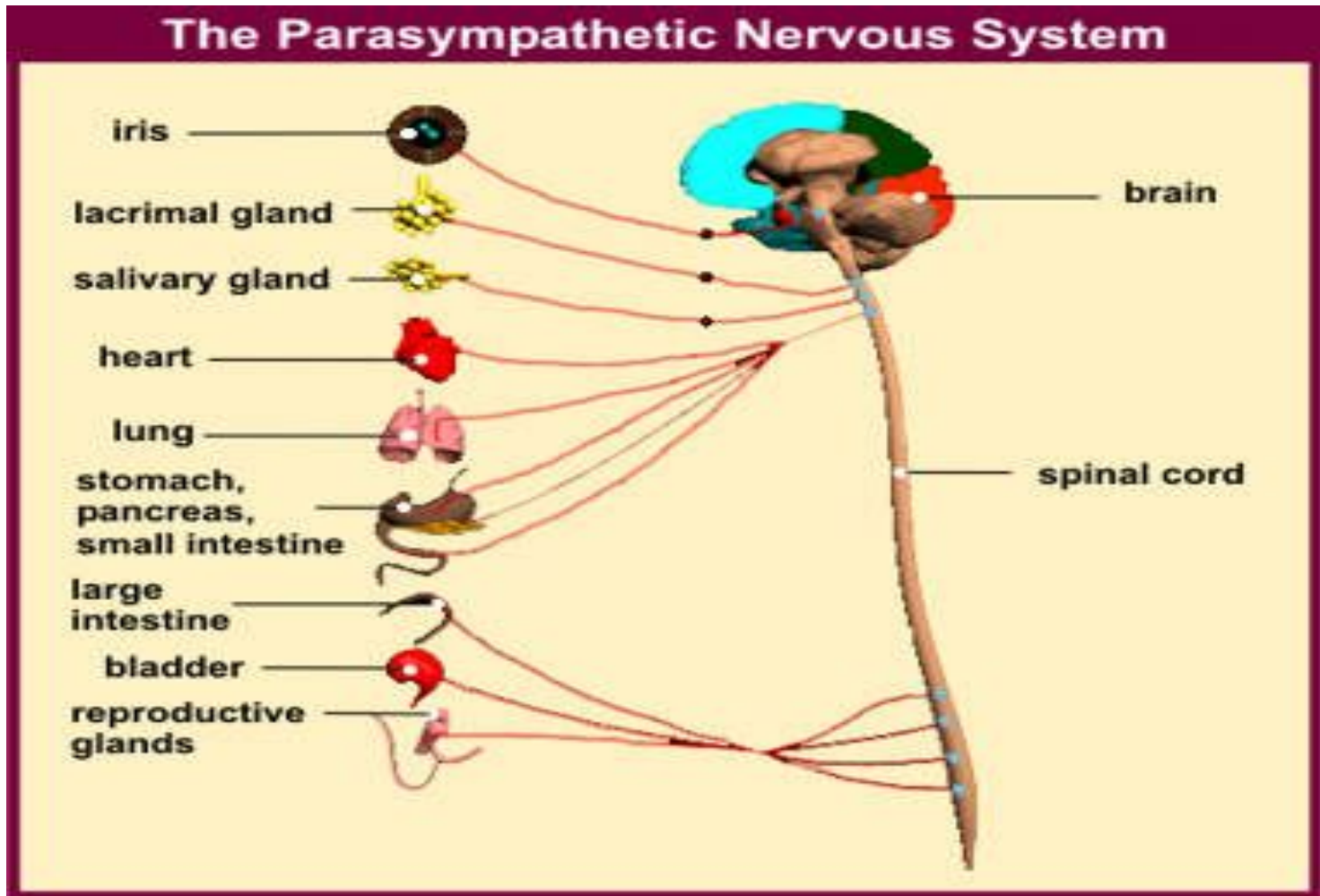
Nervous System



- Brain
- Spinal cord
- Nerves
- Special senses

- Regulate body activity by detecting changes in the internal and external environment
- Respond to changes by inducing muscle contractions or gland secretions

Massage Therapy Effects

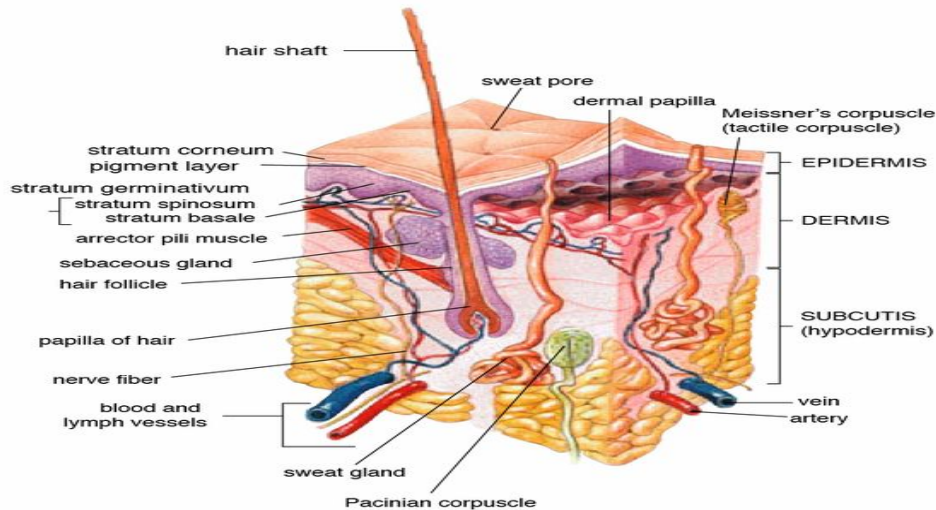


Massage Therapy Effects

Effects on the nervous system:

- stimulates sensory receptors: either excite or “relax” nerves depending on the techniques used.
- Stimulates the parasympathetic nervous system, helping promote relaxation and the reduction of stress responses. (“rest and digest”)
- Helps to reduce pain through release of endorphins (endorphins are also known to elevate the mood).
- Relieves restlessness/insomnia
- Relieves pain due to pinched nerves
- Decreases chronic pain

Integumentary System



- Skin
 - Hair
 - Nails
 - Sweat and oil glands
-
- Help regulate temperature
 - Protects the body
 - Eliminates wastes

Massage Therapy Effects

Effects on the Integumentary system:

- **Increase subcutaneous circulation**
- **Decrease subcutaneous adhesions**
- **Increase movement of the dermis**
- **Increase function of the glands of skin**
- **Causes local hyperemia**

Respiratory System



- Lungs
- Respiratory passages

- Supplies O₂ to the body
- Eliminates CO₂

Massage Therapy Effects

Effects on the respiratory system:

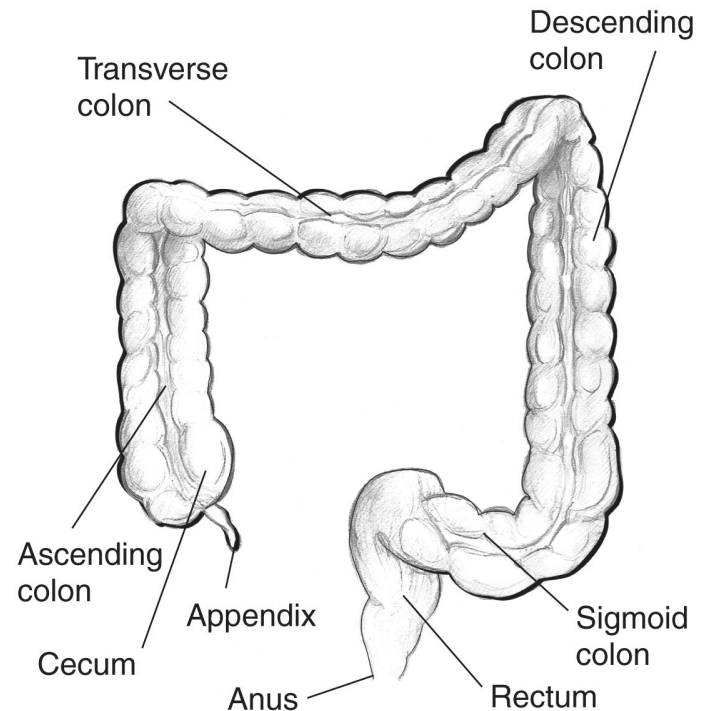
- Deepens respiration and improves lung capacity
- Loosens mucous congestion
- Cause deeper breathing, therefore increases the amount of O₂ being brought to tissues, and increases amount of CO₂ leaving tissues

Diaphragmatic Breathing

- Aka belly breathing
- Aids in relaxation
- Often suggested for those who have anxiety
- Great tool to teach patients to help them relax during treatments
- Helps to tolerate pain

Digestive System

- GI tract
- Salivary glands
- Liver
- Gallbladder
- Pancreas



- Performs the breakdown of food
- Absorption of nutrients for cells
- Eliminates wastes of the body

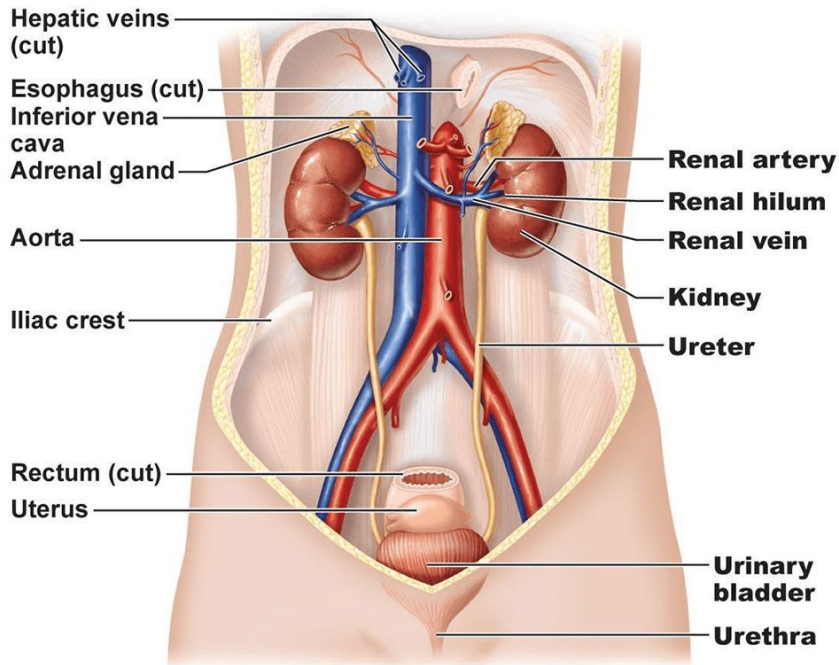
Massage Therapy Effects

Effects on the digestive system:

- Increase peristalsis in large intestine, helping to relieve constipation, colic and gas.
- Promote activity of the parasympathetic nervous system, which stimulates digestion activity (reflex, mechanical)

Urinary System

Urinary System



(a)

© 2011 Pearson Education, Inc.

Image via pinterest.com

- Kidneys
- Urinary bladder
- Regulates volume and chemical composition of blood
- Eliminates waste
- Regulates fluid and electrolyte balance

Massage Therapy Effects

Effects on the Urinary System:

Massage increases urinary output due to the increased circulation and lymph drainage from the tissues

Massage Therapy Effects

Psychological Effects:

- Reduces mental stress and promotes better sleep
- Induces mental relaxation
- Fosters peace of mind
- Decreased anxiety
- Improves energy levels

Massage Therapy Effects

Psychological Effects:

- Reduces fatigue
- Provides a relaxed state of mental alertness
- Improves concentration
- Enhances capacity for calm thinking and creativity

Massage Therapy Effects

Psychological Effects:

- Improves ability to monitor stress and respond appropriately
- Satisfies the natural need for human contact
- Promotes better sleep

What Massage DOES NOT do!

- Massage will not prevent muscular atrophy in de-innervated tissue
- Massage does not increase muscle tone, does not add strength to muscles or increase size
- Massage does not decrease the amount of cellulite in the body, “melt away fat” – NO!!

Deep Diaphragmatic Breathing Exercise

Diaphragmatic breathing should be slow, full and not forced.

Inhale through the nose, which warms and filters the air before it enters the lungs, and exhale through the mouth.

Place your hand on your abdomen.

Lift your hand up with your breath. Imagine a balloon in your stomach that you are inflating with your inhalation. This should be done with as little upper chest movement as possible

Place your hand on the lateral part of the rib cage. Move your hands out with your breathing

Place your fingertips on the manubrium, just below the sternal notch. Breathe into this area and lift your sternum.

For proper exhalation relax the diaphragm first, followed by the intercostal muscles and then the neck muscles. Gently touch each area in the above order. Make sure to bring the shoulders down.

Contraindications

- a specific situation in which a drug, procedure, or surgery should not be used because it may be harmful to the patient



Contraindications

Contraindications for Medications:

- **Analgesics:**

- » Aspirin, Tylenol, Anaprox, Motrin, “pain relievers”

- Client is unable to give accurate information about perception of pain
 - Deep pressure and extreme ranges of motion are contraindicated

- **Anticoagulants:**

- » aspirin, coumadin, heparin

- Slow the clotting process

- It is possible that deep techniques could lead to bruising

- **Anti-Asthmatic Medications**

- » Ventolin, Symbicort

- Can cause an increase in sympathetic nervous system response, such as increased heart rate, blood pressure and respiration rates
 - Techniques that are vigorous, deep or painful and hydrotherapy applications are contraindicated

- **Anti-inflammatories:**

- » aspirin, advil, clinoril

- Suppression of the inflammatory response can make an assessment inaccurate
 - Techniques such as frictions that rely on this response, are contraindicated

Antidepressants:

» diazepam/valium, prozac, paxil

- Can alter the normal responses of the vasculature to temperature changes
- Hydrotherapy applications should be at a moderate temperature

- **Corticosteroids:**

- » topicort, cortisol, corticream, aclovated
- Injection sites are to be avoided for 14 – 21 days post injection
- Prolonged injection use may lead to delayed tissue healing, decreased bone formation, connective tissue and muscle breakdown
- Prolonged used of creams may lead to atrophy of skin and subcutaneous tissue
- Techniques that stress the tissue (fascia techniques, frictions, joint play) are contraindicated

- **Muscle Relaxants**

- » flexeril, diazepam, norflex

- Alter the stretch response in a muscle
 - Deep techniques, extreme stretches and full body hydrotherapy are contraindicated

Other Precautions:

- **Blood Pressure**

- Low BP (hypotension) or High BP (hypertension)

- **Possible Allergic Reactions**

- Clients may be allergic to certain nuts and oils, cleaners or disinfectants
- Therapist must ask of any allergies the client may have
- Beware of things you eat before seeing certain patients!

Quiz 1 Next Class