

# Hydrotherapy

Separate and distinct form of therapy used for centuries

Water is used in both health care and spas

Body balancer, detoxifies, stimulates, relaxes, anesthetizes

Natural, nonallergenic, tissue-tolerant, inexpensive, and available

Liquid, steam, and ice forms allow for its use in a variety of temperatures

Can be used internally or externally

*Rest and relaxation are potential benefits of hydrotherapy; it is useful for some anxious clients because it promotes general relaxation of the nervous system.*

*Used correctly, hot and cold applications are probably the most powerful anti-inflammatory treatments, and they have essentially no side effects.*

# Effects of Hydrotherapy

Mainly reflexive (ANS) effects

Length of application determines effects

Generally, cold stimulates sympathetic and warm stimulates parasympathetic responses

Visceral reflex

Cutaneous and somatic effects

Sedating or stimulating effect along reflex loops between skin, muscle, and corresponding organs

# Effects of Hydrotherapy

Visceral reflex, cont'd

Mechanical effects

Water pressure can affect nerve and blood supply to the skin

Diffusion across permeable and semipermeable membranes

Addition or dissipation of heat energy from the tissues

# Physiologic Effects of Hydrotherapy

Can be thermal and mechanical

Circulation enhancement

Revulsive effect

Blood flow through an area increases

Derivative effect

Opposite of revulsive – goal is to shift blood flow away from an area

Collateral circulation effect

Creates change in the deep collateral branches of the same artery

*The most effective means of accomplishing the revulsive effect is to use alternating hot and cold applications repeatedly (about 3 times), and is most beneficial for tissue congestion.*

# Effects of Cold and Hot Applications

## Cold applications

Depressant – decrease in function

Tonic effects – shivering, goose bumps, etc.

Reaction – secondary return to normal function

## Hot applications

Stimulate body to eliminate heat

Effects differ based on temperature

*Many hydrotherapy techniques are directed at producing the reaction to the cold application.*

*Exposure to high temperatures can be dangerous.*



## Box 12-2

### Risks, Cautions, and Contraindications for Heat and Cold Hydrotherapy

- Clients whose ability to sense temperature changes is impaired are at risk for burns, scalding, or frostbite, because they are unable to determine whether tissue is being damaged.
- Clients with diabetes should avoid hot applications to the feet or legs and full-body heating treatments, such as hot baths and body wraps.
- Cold applications should not be used if the client has been diagnosed with Raynaud's disease.
- Elderly people and young children may not be able to adapt to long exposure to heat and should avoid long, full-body hot treatments, such as whirlpools and saunas.
- Long-duration exposure to hot treatments such as immersion baths and hot saunas are not recommended for individuals with multiple sclerosis, women who are pregnant, anyone with high or low blood pressure, or individuals with any type of heart condition.
- Temperatures higher than 104° F should never be used, because the body temperature increases very quickly and cannot adapt.

# Hydrotherapy Supplies

Tubs, bowls, and other containers of various sizes to hold water

Thermometer

Large watering can

Hot plate, large pot, or slow cooker, or electric roaster to heat water

Small refrigerator

Cotton sheets

Wool or acrylic blankets

Flannel material or towels and washcloths

Waterproof sheeting

Plastic sheeting

Classic hot water bottle

Elastic bandages

Rice-filled cloth bags

Microwave oven

Access to a tub and shower

*The equipment required for techniques must be sanitized and maintained properly.*

# Hydrotherapy Treatments

## Hydrotherapy baths

Hot full immersion bath

Neutral full immersion bath

## Variations of full immersion baths

Whirlpool

Mud bath

Herbal bath

Cold foot bath

Sitz bath

Rising temperature or warm  
foot bath

Cold arm bath

Rising temperature and warm  
arm bath

# Hydrotherapy Treatments

Saunas and steam baths

Douches

Knee, thigh, arm, face



*Examples of a knee douche and an arm douche are shown here.*

*Caution should be used with saunas and steam baths, and clients should spend no more than 15-20 minutes at a time in a sauna. Certain clients require the supervision of a physician before they may use a sauna.*

# Hydrotherapy Treatments

## Compresses and packs



*How to apply a compress: A, Wet and wring out the water; B, Apply it; C, Cover the compress with a towel.*

*With baths, the body is in the water; with a compress or pack (a material or bag that holds the water), water is layered on the body*

# Hydrotherapy Treatments

## Compresses and packs

Cold compresses

Cold packs

Hot compresses

Warm packs

Wet sheet pack

*A fomentation is a special type of hot compress that provides prolonged exposure at a higher temperature. Fomentations must be applied over a bath towel placed on the affected area, because the temperature of these compresses cannot be tolerated when applied directly to the skin*

*Hot applications are contraindicated on the extremities of diabetic individuals.*

# Hydrotherapy Treatments





*Treatment with a wet sheet pack is one of the most useful hydrotherapy procedures.*

*It requires 1 to 3 hours, depending on the client's condition.*

*A wet sheet pack proceeds through four stages: tonic (cooling), neutral, heating, and eliminative.*

# Integrating Hydrotherapy into Therapeutic Massage

Basic techniques taught for client self-help

Many simple techniques for a facility without hydrotherapy equipment

Hot and cold compresses

Hot water bottles

Foot baths

Ice on a stick for direct local application

Pure drinking water



*Water frozen in a paper cup with a stick stuck in it makes an effective massage tool, especially when the practitioner uses ice as a counterstimulant to assist in lengthening and stretching procedures*

# P.R.I.C.E. First Aid

Appropriate for most soft tissue injuries:

**P**rotection reduces risk of further injury; support guarding.

**R**est provides the opportunity for healing.

**I**ce slows metabolism, resulting in less secondary injury.

**C**ompression helps control edema by promoting resorption of fluid.

**E**levation reduces blood and fluid flow to the injury site.

Ice—ideal initial therapy for many injuries

Ice bag (or frozen peas) held by elastic reinforces physiologic action

Ice bath or massage also effective

Use periodically and alternate with rubbing

Prevent frostbite with a layer of fabric

Pain, warming, ache or throbbing, and numbness sensations

Be sure to have injury evaluated by a physician

# Use of Stones for Massage, and Integrating Aromatherapy into Massage

# Hot and Cold Stones

Types of stones used for massage

Basalt holds heat well

River rock has smooth, rounded edges

Nephrite (jade) can hold heat as well as it holds cold

*Stone therapy is a type of thermotherapy. It uses deep penetrating heat from smooth, heated stones and alternating cold from chilled stones.*

*The size, weight, and shape of the stone are more important than the type of stone.*

# Healing Properties of Minerals

Four types of electrical phenomena

Frictional electrical charges

Pyroelectricity

Piezoelectrical charges

Electrical conduction

*Gemstones and crystals exhibit rather unusual electrical properties.*



# Use of Stones During Massage

Gliding tool

Pressure point tool

Compression tool

Thermotherapy tool

*Client safety is always a concern when implements are used, and caution is necessary.*

*The use of stones for actual massage should be limited.*

*Stones used as massage tools must be polished very smooth so that they do not catch or pull the client's body hair or scrape the skin.*

# Proper Body Mechanics

## Concerns:

Gripping the stone while using it to apply pressure strains the practitioner's forearm muscles.

Not in direct contact with the client's body

Injury might occur

*The hand must remain relaxed during the massage application, or the muscles in the forearms are strained.*

*Even if the stone is not gripped but rather slid around the body, just using the palm of the hand tends to activate the forearm muscles.*

# Justifying Use of Stones

Stones typically are placed on areas of the body with concentrated neurovascular activity:

Joints

Nerve plexuses

Acupuncture points

Meridians

Chakras

*Massage therapists should avoid using gimmicks, fads, and buzz words, because these compromise the practitioner's professionalism and the validity of the treatment.*

*If you are going to use stones during massage, you should do some research about them.*

# Selecting Stones

Must be fairly flat and smooth

Flat, oval shape lies best on body

Different sizes required for different areas of body

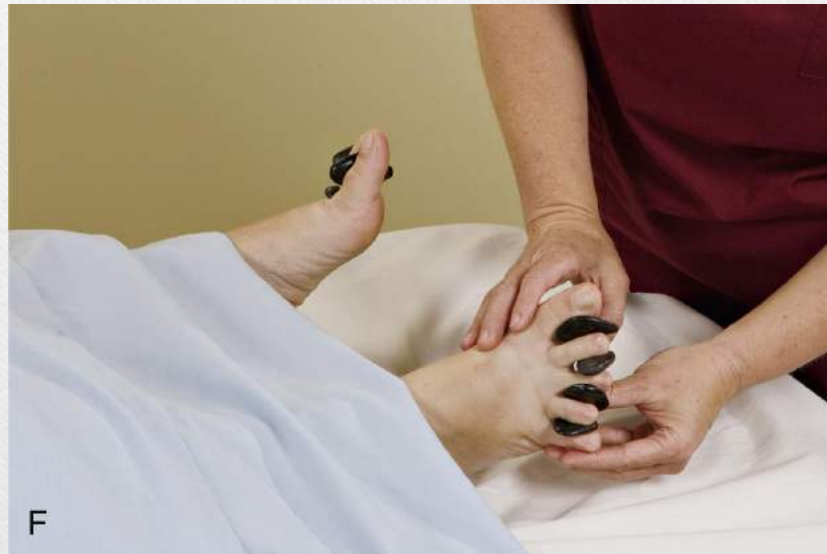
Must be able to withstand constant immersion in hot or cold water

Must be sanitized by boiling in sanitizing agent after each use

*You may search for your own stones or purchase a set from a distributor.*

# Procedure for Using Stones







1. Before the client arrives, sanitize stones and heat them in water at a temperature of 120-150 degrees F, then cool stones to 100-104 degrees F for hot and warm application, or cool in ice water or refrigeration for cold applications. Stones can also be warmed in a slow cooker.
2. Use gliding strokes with the heated stone. When the stone loses heat, replace it with another.
3. Preferably, use the warm stone to heat your hands. Then use your warm hands for massage and place the stone as described in next step.
4. Place heated stones at specific points along the body meridians, the spine, in the palms of the hand, or between the toes to improve the flow of energy in the body.



5. If the client has inflammation or a muscle injury, use cold stones in those areas.

6. Cover the area with a sheet and then place the stones on the sheet rather than directly on the skin; this is the safest and most sanitary method. With direct application to the skin, the most serious concern is burning the client if the stone is too hot for the individual's skin and/or if it is left on too long.

7. Massage practitioners are rarely the target of lawsuits, however, incorrect use of hot stones, resulting in burns to the client, has produced a number of cases of litigation.

8. Apply the stones with an intentional, centered approach.

9. Placement of stones can be combined with general massage.

10. If the therapeutic benefit of stone application depends on temperature and weight, cloth bags filled with rice or other grains can be used.

A pair of sock makes a great bag for this purpose.

Fill one sock with the grain and tie the end tightly with string. Then slip the other sock over the filled one and tie it off with a string in a bow that can be tied and untied. The top sock can easily be removed and laundered.

# Aromatherapy

Involves the use of essential oils, which are distilled extracts from aromatic plants

Used in healing mind, body, and spirit

Essential oils can be inhaled or absorbed through skin

Massage can be combined with aromatherapy

*Aromatherapy training ensures that the practitioner is prepared to take a client history and can perform an assessment, recognize contraindications, and create essential oil blends designed to address the client's specific concerns.*

*The client's consent should be obtained before essential oils are used.*

# Essential Oils

## Effects of essential oils

Skin—Dissolve dead surface cells, increase cell turnover, stimulate metabolism, improve texture, add softness and radiance, and stimulate and tone

Nervous system—Can calm, soothe, promote relaxation, and give a sense of euphoria

Glands— Have soothing and sedating or toning and stimulating effect

Muscles—Relieve fatigue, reduce soreness and stiffness, and improve resilience and elasticity.

*Essential oils are subtle, volatile chemicals distilled from plants, shrubs, flowers, trees, roots, bushes, and seeds.*

*Essential oils are beneficial both through inhalation of the scent, which affects the limbic system, and through lipid absorption of the oil through the skin.*

## Suggested additives for bath water or massage oil:

Relaxing—lavender, clary sage, Melissa, ylang ylang, bergamot, chamomile

Stimulating—rosemary, thyme, lavender (toning), pine, cypress

Soothing—chamomile, jasmine, geranium, rose

Moisturizing—orange blossom, neroli, patchouli, lavender

## Fragrance oils

Blended synthetic aroma compounds diluted with carrier oils

Not therapeutically effective

## Carrier oils

High-quality, fresh vegetable oils that are used to dilute essential oils

Have their own therapeutic qualities

# Benefits of Aromatherapy

Some medicinal properties

Ability to lift spirits – enhance mood and emotions

Relaxation

Stress relief



*Essential oils can help with moderate anxiety and depression, insomnia, digestive disorders, headaches, and muscle aches and pains.*

*Many essential oils are wonderful for skin care.*

*Essential oils can be used in hair and scalp products to improve circulation to the scalp, to prevent dandruff and promote healthy new hair growth.*

*Essential oils can help heal many minor skin problems when used with appropriate health care supervision.*

*Steam or direct inhalation of essential oils can help reduce cold and flu symptoms such as coughs, tonsillitis, sore throats, sinusitis, and bronchitis.*

# Aromatherapy Safety Guidelines

Always dilute essential oils in a carrier oil

Patch test when using a new oil on a client

Be familiar with contraindications

Use smallest amount possible

Do not assume every oil can be used safely

Keep out of children's reach and away from animals

Do not ingest oils

*Although many oils are useful, some are not safe to use at all, and proper safety guidelines must always be followed when using essential oils.*

*Practitioners should receive advanced training in the use of essential oils before offering aromatherapy massage.*

Essential oils are flammable; store properly

Keep oils away from eyes

Do not use same oils for prolonged period

Use photosensitizing oils cautiously

Store away from light and heat

Keep cap closed tightly

# Oils that SHOULD NOT be used on Anyone

*Bitter Almond*

*Boldo Leaf*

*Calamus*

*Camphor*

*Horseradish*

*Jaborandi leaf*

*Mugwort*

*Mustard*

*Pennyroyal*

*Rue*

*Sassafras*

*Sacin*

*Southerwood*

*Tansy*

*Tuja*

*Western red cedar*

*Wintergreen*

*Wormseed*

*Wormwood*

# Oils that SHOULD NOT be used on Pregnant Women

*Aniseed*

*Basil*

*Cinnamon*

*Clary sage*

*Cypress*

*Fennel*

*Hyssop*

*Jasmine*

*Juniper*

*Marjoram*

*Myrrh*

*Origanum*

*Peppermint*

*Rose Rosemary*

*Sage*

*Thyme*

# Oils that SHOULD NOT be used on Individuals with Epilepsy

*Camphor*

*Fennel*

*Hyssop*

*Sage*

*Rosemary*

# Aromatherapy Applications

Aromatic bath, hot tub, or sauna

Aromatic compress

Aromatic facial steam

Environmental and room fragrance

Aroma lamps

Inhalation

Aromatic spray

Massage



# Choosing Essential Oils to Complement Massage

Offer a selection of oils you can tolerate (no more than 10).

Let the client sniff each oil; have the person choose one or two he or she really likes and then the one the individual least likes.

Create a unique blend for the client with 2 drops of each of the preferred oils (4 drops total) and 1 drop of the least favorite oil (blend no more than three oils).

*Look up the characteristics of the oils with the client and see how they relate to the client's current condition.*

*Blend the unique mixture into a carrier oil chosen according to the client's skin type and the qualities of the carrier oil.*

# To Test

Access Code: **S3PT**

*Please write down code. You will be asked for it*

Once you have successfully passed the test (70% correct), please email Kim Jackson at [kim\\_hotschool@yahoo.com](mailto:kim_hotschool@yahoo.com). We will email you your CE certificate within 7 business days.