

## **Hydrotherapy Treatments**

### **Heating Compress**

Heating compresses cause warming to the area being treated through the application of cold. Cold applications cause the blood to circulate to the inner core of the body where it is warmed and re-oxygenated and then circulated back to the affected area. An additional effect of this flushing action is an increase in the white blood cells migrating to the affected area and the removal of inflammatory chemical mediators to lessen pain and decrease inflammation.

Depending upon the condition being treated, and the use of additional therapies, the patient may experience a slight rise in temperature. This is a good sign that the treatment is working and will help restore normalcy.

#### **Materials:**

Cotton cloth or towel large enough to cover the area to be treated.

Wool or flannel cloth large enough to cover the cotton cloth.

Safety pins or other fastening devices.

Wool blankets if necessary.

Tee shirts, cotton socks, gloves, sweaters, wool shirts or underwear may also be used.

#### **Procedure:**

If the patient is already chilled, warm them up by using a warm foot-bath, hot shower or wrapping in wool blankets.

Wring out the cotton cloth that will be applied directly to the skin over the area to be treated in cold water. Make sure to wring out as much water as necessary so that it no longer drips. Ice cold may be used but is not necessarily better.

Wrap the cold compress snugly to the area to be treated so that no air can cause excess cooling through evaporation.

Wrap the dry wool or flannel compress over the cold wool compress and secure with safety pins or other devices such as a blanket. Do not wrap so tightly that the circulation is impaired.

Keep the compress in place over night or until it dries completely, then remove.

You can renew the compress at this time or wait a few hours until repeating.

This treatment often goes well with some hot yarrow and lemon tea if it is being used for a cold or flu. This will help to raise the temperature and cause sweating.

### **Brand Bath**

The Brand Bath is an immersion bath designed to lower very high temperatures in patients suffering from prolonged fever. It is a gradual decreasing of the bodies heat by

adding cool water to warm bath that has been heated to a temperature that is slightly below the patient's oral temperature. For example; if the patient has an oral temperature of 106°F/ 41°C, then the bath should be heated to 104°F/ 40°C to begin. The Brand Bath is contraindicated if the patient is experiencing fever and chills.

**Procedure:**

Place the feverish patient in a bath that is 2 degrees less than their oral temperature. Wait 10 minutes then retake the patient's temperature. If it has come down to the temperature of the bath, lower the temperature of the bath an additional degree by adding cold water.

Repeat the above sequence as often as it takes to bring the fever to an acceptable range. Continue to monitor the patient's temperature after the bath has been completed in case it being to elevate again.

### **Alternate Baths/Friction Rub**

The purpose of the alternating hot/cold bath and friction rub is to stimulate blood flow either generally or to a specific area. The alternating hot/cold cycle will increase blood flow considerably allowing for a flushing effect and elimination of toxins, pain mediators and decrease lactic acid while increasing oxygenation. These are good for breaking up congestion, especially in the chest.

#### **Alternating Hot/Cold**

Generally this is accomplished by either submerging the body part in alternating tubs of water that are hot or cold, such as a sitz bath or applying a heating compress followed by a cold pack. As a rule: hot should be applied for 3 to 5 minutes followed by cold for not longer than 1 to 2 minutes. The cycle may be repeated as many times as needed but should always end in cold.

#### **Hot/Cold Friction Rub**

A wool or cotton mitten can be used, but if not available, mitten pot-holders will do. Dampen one slightly with water and heat in the microwave for from 1 to 3 minutes. This will vary depending upon the density of the material and the persons sensitivity to heat (a separate glove may need to be worn in addition to the mitten). The second mitten should be dampened slightly and placed in the refrigerator or freezer (briefly).

Rub the affected area with the warm mitten for 1 to 2 minutes followed by an application of the cold mitten for the same length of time. The skin should get red at first then become pale after the cold application. Repeat several times until the desired effect is achieved.

## **Heating Pack**

A heating pack can be used for a variety of conditions such as muscle spasms or tightness, over an ear or around the throat to increase circulation, to help with colic or abdominal discomfort, or just to warm the person if chilled. Heating packs will eventually have the opposite effect from that desired, so it should not be used for prolonged periods of time. Having someone go to bed on with a heating pad can be detrimental. A hot water bottle on the other hand, that eventually cools down, may be used.

### **Materials:**

Cotton cloth or towel.

Microwave oven or hot water source.

Heating pad is optional.

### **Procedure:**

Wet the cloth and wring out as much of the water as possible so that it is damp but not soaked.

Heat in the microwave for several minutes. This will vary depending upon the thickness and size of the cloth. If it burns your hands when removed, it will burn the patient; so cool it off a bit by waving it in the air.

Apply to the area being treated. Note the time it is placed.

An alternative if no microwave is available can be the placing of a heating pad over the damp cloth. This will heat the cloth.

Leave on for up to 10 minutes, then reassess the condition to see if additional heating is needed. If so, wait 5 minutes before reapplying another heating pack. You might want to rub the area with a cold mitten friction to stimulate circulation.

## **Hot Foot Bath**

The hot foot bath is simple and easy to do, thus making it a frequently performed home treatment. It is indicated for the onset of colds or influenza, pulmonary congestion, congestive headaches, chills, fatigue, and nosebleeds. It has also been used for menstrual irregularities and pelvic congestion. It is contraindicated if there is peripheral vascular disease, thromboangiitis, loss of heat or cold sensation, and in diabetics.

The prolonged application of heat to the feet causes the blood to flow to this area and remain, thus relieving other areas of congestion and stagnation.

### **Materials:**

foot tub

thermometer

blanket

towels

chair

washcloth

pitcher of ice water

Optional: mustard powder (1 tsp) or epsom salts 9(1 to 2 tsp) to add to the bath.

**Procedure:**

With the patient seated drape them with the blanket.

Fill the foot bath with hot water not to exceed 104°F/ 40°C.

Place patient's feet into the tub then drape the rest of the blanket around it forming a tent like structure.

Over the next 5 minutes gradually add hotter water until the temperature reaches but does not exceed 110°F/ 43°C. The patient's feet can be removed prior to adding the water or it can be mixed in as it is poured.

Maintain the 110°F/ 43°C temperature for 10 to 30 minutes. During this time a clod wash cloth can be applied to the patients forehead and/or back of neck as needed to avoid cerebral congestion.

At the end of the treatment, briefly pour cold water over the feet and ankles, then dry thoroughly with a towel.

A brief witch hazel or alcohol rub can be performed if the patient is perspiring to cool them down.

Allow them to rest for at least 15 minutes.

### **Wet Sheet Pack**

The wet sheet pack is a therapy that can treat a wide variety of conditions simply because of its therapeutic range. It is designed so that the patient goes through a variety of stages, each providing a therapeutic benefit. Along with constitutional hydrotherapy, it stimulates the patient's vital force to promote healing. This is accomplished through 4 stages.

First stage is cooling and lasts about 5 to 20 minutes. Dilation of the peripheral vasculature occurs with this stage being tonifying.

Second stage the neutral period when the patient begins to warm up. This lasts from ½ to 1 hour. Heating of the periphery in response to the cold wet sheet occurs. This phase is somewhat sedative.

Third stage is the heating stage when the patient begins to get warmer and start to perspire. This lasts from ½ to 1 hour. This phase is stimulative where increased circulation, metabolism and elimination occur.

Fourth stage is the sweating stage which can last for up to 1 hour before the treatment is terminated. This phase is detoxifying.

The stages are determined by the patient's response and may be longer or shorter as is necessary. As with any hydrotherapy treatment, the patient should be monitored throughout it as they may experience some brief anxiety or discomfort. The wet sheet pack is effective for a variety of conditions from colds and flu's, to Crohn's disease, IBS, insomnia, fever, weakness, pneumonia, bronchitis, sinus congestion, drug, alcohol or nicotine addiction.

It is contraindicated in anemia, extreme debility, claustrophobic patients, skin conditions that are worse with moisture, diabetes or other circulatory problems.

**Materials:**

treatment table

2 or more wool blankets

2 or more large cotton sheets

wash cloth for cold compress

towels

pillow

friction mitt or terry cloth towel

**Procedure:**

Have the patient take a hot shower or bath prior to the treatment. Have them make it as hot as they can take it for as long as they can take it, but not to exceed 15 minutes. Their skin should be red when they get out.

Prepare treatment table by laying the wool blankets down first so that the patient will be wrapped from their neck to their feet. Place a dry cotton sheet on top of the blankets.

The cotton sheets should be long enough so that the patient is covered from their neck to their feet as with the blankets.

Emerse the last cotton sheet in cold water and then wring out as much of the water as possible before laying it on top of the dry cotton sheet. This procedure may take 2 people to perform. The cold wet cotton sheet is positioned so that it will be in contact with the patient's skin.

Have the patient get out of the hot shower and quickly have them lie on the cold wet sheet. They do not have to dry off. They should raise their arms over their head before the cold wet sheet is wrapped around them.

Quickly wrap the patient in the cold wet sheet, making sure that it is compact to their skin so that there are no air pockets. Have them lower their arms and then wrap the dry sheet around them. Then wrap the blankets so that the patient is wrapped like a mummy. The blankets and dry sheet should be wrapped looser than the cold wet sheet.

Begin monitoring the patient. An application of a hot water bottle or hydrocollator pack can be applied to their feet if they become too chilled initially. Offer water or herbal teas as desired or needed.

At the end of the treatment, a cold mitten friction can be done, and the patient should rest

on a dry sheet for ½ hour.

### **Steam Inhalation**

Steam inhalation is one of the oldest forms of hydrotherapy known to mankind. While in the modern era steam inhalators or commercial vaporizers are readily available, a makeshift treatment can be done if they are not available. Steam inhalation helps to increase expectoration of mucus from the respiratory tract while increasing circulation to the bronchial mucosa. This helps to relieve congestion and open up the air passages to make breathing easier. Aromatic oils such as eucalyptis can be added as an antiseptic and to help open respiratory passages.

The treatment can be used for coughs, laryngitis, respiratory tract congestion, sore throats, sinusitis, respiratory difficulty, and excessive bronchial mucus. It is contraindicated with congestive heart failure, cardiac asthma, and in the extremely young or frail elderly.

#### **Materials:**

Tea kettle or pan or commercial mister.

Hot plate or stove

Aromatic oils (optional)

Sheet

Umbrella

Newspaper funnel

#### **Procedure:**

Fill kettle with water and bring to a boil.

Add medicated oils if desired.

With the umbrella and sheet, rig a “tent” to cover the patient’s head and kettle.

Roll the paper into a cone with the large end near the kettle and the small end toward the patient. Have them breathe slowly and deeply as the steam arises.

Wipe the patient’s face with a cool damp cloth as necessary for perspiration.

Continue the treatment for 30 to 60 minutes. This can be done 1 to 4 times per day.

At the end of the treatment, the patient should rest.

### **Constitutional Hydrotherapy**

Constitutional hydrotherapy is the primary hydrotherapy technique used in the office to treat a variety of medical conditions. It is used in lieu of the wet sheet pack as it is faster and easier to perform and has an electric current component to help balance the sympathetic and parasympathetic nervous systems, and stimulate elimination. Even without use of galvanic sine wave, it can be done at home with the patient receiving considerable benefit.

The purpose of this treatment is to stimulate healing by causing changes in circulation to the internal organs. It can be applied in almost any acute or chronic health conditions. Constitutional hydrotherapy stimulates blood flow and thus increases oxygenation of the tissues. It increases the white blood cell count for up to 36 hours. It help the body to raise its core temperature 1/2°F to 1°F which helps fight off viral or bacterial infections. It balanced the sympathetic and parasympathetic nervous system resulting in relaxation and better sleep. It stimulated the liver and bowels to eliminate toxins.

**Materials:**

Wool blankets (2).

Sheet & pillow.

3 cotton hand towels.

Hot water source, a microwave oven is excellent.

Cold water, an ice bath will work fine.

**Procedure:**

Take the patient's temperature and pulse prior to performing the procedure.

On a treatment table or bed place the 2 wool blankets so that the patient will be wrapped fully from their neck to feet.

Place the dry cotton sheet on top of the wool blankets with the pillow at the head.

Wring as much water out of 2 of the hand towels and heat in the microwave until they are well heated. This takes about 5 minutes.

Place the 3<sup>rd</sup> cotton hand towel in a cold water bath.

Have the patient remove all clothing from the waist up and lie on their back on the cotton sheet.

Depending upon what their initial temperature is determines the amount of time for the hot towel application. (see graph).

Place the first hot towel on their chest from the neck to the umbilicus, making sure that it is not too hot. (If it burns your fingers it will be too hot for the patient.) Wrap them up in the sheet and blankets for the proscribed amount of time.

When this time has been reached, reheat the 2<sup>nd</sup> towel for 30 seconds and then place on top of the first towel. Then flip them over with the new hot towel being placed next to their skin and the first being removed.

Immediately wring out as much water from the towel in the cold bath and place it on top of the second hot towel. Flip these over until the cold towel is next to the skin, removing the first.

Wrap the patient back up in the sheet and blankets for 10 minutes.

After 10 minutes, unwrap the patient, remove the cold towel and have them turn over. Reheat the 2 hot towels for at least 2 minutes and place the first on the patient's back, being careful not to burn them. Leave this one on for the proscribed time period then repeat steps 9, 10 and 11.

After 10 minutes, recheck the patient's temperature and pulse. Remove the cold towel and unwrap the patient. They may want to rest for a period of time afterward and should be allowed to do so.

<b>Temperature</b>	<b>Time</b>
96.0/35.5 to 97.0/36.1	5 minutes
97.0/36.1 to 97.5/36.3	4 minutes
97.5/36.3 to 98.0/36.6	3 minutes
98.0/36.6 to 98.6/37.0	2 minutes
98.6/37.0 to 99.0/37.2 or greater	1 minute

**Temperature conversion:**

To convert °F to °C, subtract 32, then multiply by 5/9 or 0.555.

To convert °C to °F, multiply by 9/5 or 1.8 then add 32.