CONNECTICUT VALLEY HOSPITAL

Physical Therapy Services

PT Equipment Procedure # 13

Re: Whirlpool

Date: March 20, 2000
Revised: October 19, 2008

Description:
A whirlpool is a water bath in which the water is agitated by an electric turbine.

Indications:
Provides moist heat to the treatment area. Assists in the cleaning of wounds and is a supportive medium for exercise. The massaging agitation may assist in mobilizing edema and offers some additional stimulus to the circulation.

Precautions:
When body temperature equals the environmental temperature, the only means of heat loss is evaporation. If a large portion of the body is immersed, the patient's remaining skin surface may not be able to efficiently lose the heat, faintness and fever can develop. Keep room humidity low and use cold compresses to the head. Occasionally, a patient may become "seasick" from watching the water. Be certain that the tank is properly grounded; check ground fault circuits.

Procedures:

1. Fill the tank to the desired temperature.

Very Hot	**over 104°F**	**(40-46°C)**
Hot	**99 - 104°F**	**(36.5-40°C)**
Warm	**96 - 99°F**	**(35.5-36.5°C)**
Neutral	**92 - 96°F**	**(33.5-35.5°C)**
Tepid	**80 - 92°F**	**(27.5-33.5°C)**

Patients with open wounds, circulatory disorders, sensory disorders and cardiac conditions should receive **neutral baths,** which are sedative and safe. Patients with chronic conditions, especially arthritic patients may receive **hot baths.** Patients with small local areas to be treated may be treated with **warmer** temperatures than patients with general conditions. Patients with painful conditions, and no other existing contraindications, may receive **hot to very hot baths.** Patients, who receive the whirlpool solely as a medium for exercise, should receive **tepid baths.**

***It is not safe to exceed 110°F with any whirlpool treatment.**

2. Place a chair by the side of the whirlpool for treatments of the upper extremity, a high swivel seat at the end of the whirlpool for a foot or ankle treatment, or a seat in the whirlpool for more general treatments.

Staff should refer to the Physical Therapy Infection Control Procedures for information on disinfectant medium and wound dressing procedures.

3. Position the patient so that the area to be treated is in the water and the patient is comfortable supported.

4. If dressings are present, remove them or allow them to soak off before turning on the agitator.

5. The turbine ejector must be kept open at all times. The turbine is cooled by the water in the tank circulating around it at a rate of up to 45 gal/min. to insure free circulation of the water. Check the following:

a. The turbine shaft must be immersed in the water at all times.
b. The patient must not lean against or place fingers and toes against the ejector.
c. No dressings or hospital gowns should be floating in the water since they can get sucked into the turbine.

6. Direct the turbulence at the involved area unless it causes additional pain. If so, indirect agitation may be used.

7. The agitation may be adjusted for force aeration and direction. The lever near the top of the shaft adjusts the force of the agitation. The butterfly near the top of the shaft adjusts the aeration. The entire unit will move from side to side. The knob at the back of the unit will release the shaft and permit it to be raised and lowered.

8. The duration of treatment varies with the condition, however, initial treatments for acute conditions are about 10 minutes; chronic conditions about 20-30 minutes.

9. At the conclusion of the treatment, dry the patient and proceed with other treatments as indicated.

10. Clean the whirlpool as per Physical Therapy Cleaning Procedures – including the turbine ejector, thermometer, shaft and drain.

11.All Whirlpools receive Biomedical Testing annually in January of each year.