

Underwater Pressure Massage

by Dr Reinhard Bergel



The therapeutic benefit of the underwater massage comes from the relaxing effect of warm water, applied at variable force on the muscles, particularly on deep-lying muscle layers, subcutaneous tissues, skin and the abdominal organs (intestines).

- In the underwater massage, the client lies relaxed in a large tub of warm water. A stream of water under pressure, (ranging from 0.5 to a maximum of 7.0 bar absolute pressure units), is applied by means of a hose that has interchangeable nozzles.
- The water needed for the massage is drawn from the tub and returned under pressure through the hose. The high-pressure stream of water is created by an internal pump.

WATER TEMPERATURE

The temperature of the water in the tub should be 36.0°C; (96.8 °F to 100.4 °F). The temperature of the pressurized stream can be adjusted to a higher or lower temperature than the water in the tub. The water temperature is precisely measured by a built-in thermometer.

PRESSURE CONTROL

Pressure is controlled by a manometer. However, because the stream of pressurized water has to travel through the water in the tub, the pressure shown on the manometer is not necessarily the pressure that is felt by the client. Adjust pressure accordingly.

The diameter of the nozzles range from 0.1 to 0.8 mm, the narrower the nozzle the more forceful the stream. If the stream causes a stabbing pain, the muscles will react with an increased defensive tightening, the opposite of the intended effect. Nozzles with medium and larger diameters are generally preferred.

For clients who have sensitive tissue such as track and field athletes one must begin with low water pressure (0.5-1.5 bar), and raise the pressure slowly. Conversely clients with large muscle mass, such as heavyweight wrestlers and boxers, can usually withstand higher water pressures (2.0-4.0 bar). The massage should always be individualized, as the client's comfort is essential when administering the treatment.

TREATMENT POSITIONS

When massaging the back the client is always lying on their side. In this position, the hips and knees are slightly bent, the head and neck rest on a support. A massage with the client in a prone position is not recommended because it places the client in a hyperlordotic position.

The back should be massed from the pelvis, gluteus maximus and sacrum upwards along the spinal column. The muscles of the back, the erector spinae, latissimus dorsi and trapezius should be massaged with a diagonal or circular motion. The intercostal areas should be stroked out from the spinal column to the sternum. Circular and diagonal motion is also suitable for the neck, should muscles i.e. the trapezius, rhomboideus and the scapulae.

The thorax and the abdomen are massaged with the client in the supine position. The large thoracic muscle and the pectoralis major should be massed, with a gentle circulating stream, excluding the armpits and the breast area. The abdominal region should be massaged with a gentle circular stream along the course of the large intestine.

LENGTH OF MASSAGE

Generally, the length of a massage is 20 to 30 minutes. It's necessary for the person to get used to the water for a few minutes before starting the massage.

After the massage, the client may want a cold affusion to stimulate circulation. The client should then rest for approximately 30 minutes.

Sensitive areas of the body, such as the spinous processes of the spinal column bone spurs, genitalia, anus, back of the knees and the female breasts should be avoided during the underwater massage. Similarly, the massage is not recommended for any recent athletic injuries; open wounds; hematomas in an acute state; effusions in the knee joints; acute muscle, ligament and tendon pulls; and recent fractures.

THE UNDERWATER MASSAGE IS INDICATED FOR THE FOLLOWING:

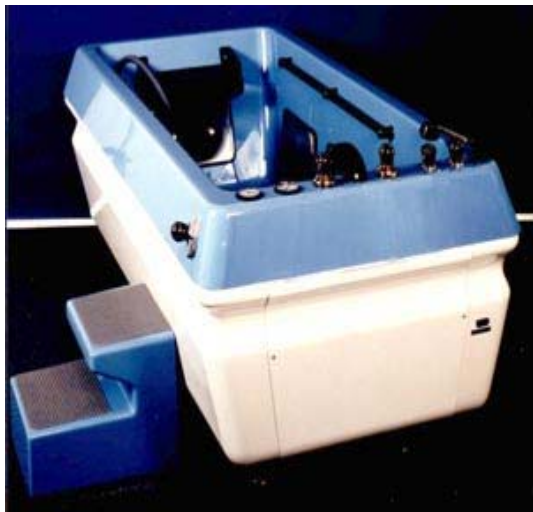
- Fractures
- Osteosynthesis
- Dislocation
- Sprains
- Contusions in the subacute stages after a patient has been released
- Sciatica
- Lumbalgia
- Brachialgia
- Joint and Scar contractures
- Myogeloses
- Degenerative Spinal Disorders
- Chronic Joint Rheumatism
- Muscular Rheumatism
- Bechterev's Disease (ankylosing spondylitis)
- Scoliosis
- Flaccid and Spastic Paralysis

The underwater massage can also be utilized for muscular hypertonia and for uninjured athletes as a warm-down massage after strenuous training and competition.

CONTRAINDICATIONS

The underwater massage is contraindicated for cardiovascular insufficiencies, venous disorders, thromboses and varices.

ABOUT THE TUB



An easy to operate modern bathtub, the bathtub assembly is made of reinforced fibre, polyester-resin casting (GFK), especially tempered to provide heat and shock resistance. The surface will resist thermal and seawater, plant extracts and chemicals. All surfaces are smooth and free of pores making the tub hygienic and easy to clean.

The water pump is noiseless, enclosed in a plastic casing with a conveying efficiency of 200l/min., infinitely variable from 0 to 6 bars. All fittings are chrome plated.

Excerpts from "physical therapy" Pov Sports Kuprian, Saunders, Philadelphia 1983. " Hydro-und Balneotherapie". Otto Gillert, Pflaum Verlag, Munchen, 1982.

"Die Unterwasser Dricks Trahmassage", S. Bernhardt U.G. Schenk, Potsdam 1962.

Tomado de: HEAT Spa Kur Therapy Development Inc.