

CONNECTICUT VALLEY HOSPITAL

Physical Therapy Services

PT Equipment Procedure #14A

Re: Phonophoresis

Date: August 16, 2001

Revised: October 19, 2008

Description:

Phonophoresis is the usage of ultrasound wave is used to push molecules of a pain-relieving chemical into the tissues. Once subcutaneous, the molecules are broken down into ions and taken up into the cells.

The following pain relieving chemicals can be administered with phonophoresis:

1. 10% Hydrocortisone cream mixed with 90% Ultrasound Gel, where pain is the result of inflammation.

Indications:

1. Localized pain of an acute or long-term nature.
2. Localized inflammation.

Contraindications:

1. All those listed under ultrasound.
2. Sensitivity to the topical medication being used during Phonophoresis.

Procedures:

1. Prepare skin as would be done with ultrasound, usually for the best conductivity, it is useful to apply heat for 5 to 10 minutes to the skin.
2. Instruct patient about the treatment and what is expected.
3. Depending on the size of the area to be treated, the size of the sound will vary. Applicators of varying size and frequency will effectively radiate different size area. The applicator produces a cylindrical beam with an area of 1,5, or 10 cm squared.

The beam pattern is a bell shaped curve. This is the area that will receive the most medication with Phonophoresis. 1.5 W / cm squared is the most commonly used intensity.

4. The medication is placed on the patient's warmed skin over the area to be treated. Position the patient to maximize circulation to the area being treated. It is preferable that the medication be premixed with ultrasound gel for the best transmission.
5. The duration of the treatment varies depending upon the size of the area to be treated. A generalized rule is 5 minutes for each 25 square inches of skin to be covered.
6. Treatment frequency varies but is usually 2 to 3 times per week for 3 weeks. If no improvement is noted, additional time may be added to a maximum of 15 treatments.
7. If possible, leave the medication on the skin with an occlusive dressing after treatment.
8. Clean the ultrasound machine as per Physical Therapy Cleaning Procedures.
9. Each ultrasound machine receives Biomedical Testing annually in January of each year.