

CONNECTICUT VALLEY HOSPITAL

Physical Therapy Services

PT Equipment Procedure #41

Re: Iontophoresis

Date: February 26, 2002

Revised: October 19, 2008

Description:

Iontophoresis is the administration of soluble salts and other drugs into the body by the usage of electrotherapy to “push” the medication through the skin. This method of treatment prevents the tissue damage associated with hypodermic injections, minimizes the infiltration of carrier fluids, and avoids pain associated with needle insertion. Iontophoresis permits the administration of pain and edema-reducing medications to a small area of the body over a longer period of time (i.e. 10 minutes) which allows for increased absorption.

The following pain relieving and edema reducing medications can be administered with iontophoresis:

1. Lidocaine HCl 4%
2. Dexamethasone, Sodium Phosphate 4%
3. Acetic Acid 2%

Indications:

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

Contraindications:

1. Patients with electrically sensitive support systems (e.g. pacemakers).
2. Patients with sensitivity to the drugs being administered.
3. Usage over damaged tissue or scar tissue.
4. Usage across either temporal region.
5. Usage over the orbital region.

Procedures:

1. Physician will place order on the Physician’s order sheet. Pharmacy will fill prescription and place in patient’s drawer in medication cart. Nursing staff will give the medication to the Physical Therapist providing the treatment. Following treatment, one-use pads will be placed in red hazardous waste box. Any unused

medication and the syringe will be disposed of properly. Documentation of treatment provided and outcomes of treatment will be documented on the Physical Therapy Treatment Log Form (CVH – 511).

2. Examine skin sites for both electrodes, checking for broken skin. As per Contraindications, Iontophoresis can not be used over damaged or broken skin.
3. Prepare electrodes. Fill syringe with the proper amount of the selected water-soluble medication. Do not use medications, which are suspensions.
4. Remove EZ Fill Window flap from back of drug electrode to expose GelSponge pad. Saturate the GelSponge pad with medication, being sure to eliminate any dry spots.
5. Prepare the areas of skin where both electrodes are to be located. Briskly rub both areas for 6-8 seconds with the alcohol prep to remove dry skin, oils and other contaminants.
6. Apply dispersive pad: Apply the dispersive pad over a major muscle at least six inches away from the drug electrode site, proximal to the hydrated electrode. Avoid placing pad over a bony prominence. Apply off set from the hydrated electrode with tab facing proximally.
7. Apply hydrated drug electrode with tab facing distally.
8. Connect lead clips from iontophoresis unit to drug electrode and dispersive pad. Be sure leads are connected properly for the polarity of the drug being delivered.
[Drug/Polarity – Negative: Drug Electrode – Black (Negative) : Dispersive Pad – Red (Positive) and Drug/Polarity – Positive : Drug Electrode – Red (Positive) : Dispersive Pad – Black (Negative)
9. Set the ionto unit to deliver recommended total dose. Usual dosage is 40mA-Min (10 minutes at a current of 4 mA). Push the ON/SELECT button until desired current level LED is lit. Note: Currents less than 4 mA =may be used with sensitive individuals or sensitive anatomic sites.
10. Stopping treatment automatically: after the preset dose of 40 mA – minutes are delivered, the current automatically ramps down to 0.0 mA. After 0.0 mA is reached the unit will beep and automatically turn off.
11. After each use, the machine will be wiped down with an alcohol prep pad and put away.
12. The Iontophoresis machine receives Biomedical Testing annually in January of each year.