Schedule an appointment for a Dupel in-service, or to learn how to Acquire® a Dupel device at no cost beyond electrodes. Call Empi Today at 800.325.5663!
Iontophoresis...

What is Iontophoresis?
Iontophoresis is a method of delivering medications through the intact skin. It uses an electrical field to accelerate drug ions into a focal region under the skin. Like charges repel; opposite charges attract. A negative current applied over an electrode containing a negatively charged medication will repel the drug ion through the skin.

In contrast to passive drug delivery patches, that use only diffusion to transport non-polar lipid-soluble drug molecules into the skin for systemic delivery, Iontophoresis delivers water-soluble medications into a localized region. If performed with effective voltage levels, iontophoresis delivers 10 times more drug than passive diffusion.

What Medications are used?
The medication being delivered is based on the medical condition being treated. In order to be delivered by iontophoresis, the drug must fall within the following profile.

- The drug must be charged (i.e., water-soluble, polar, ionic)
- The drug must be relatively small with a molecular weight of 8000 Daltons or less
- The desired effect of the drug must be local

What’s Required to do Iontophoresis?
- Current generator that allows the medical professional to set desired dosage and has enough voltage to overcome skin impedance
- Electrodes that control potentially harmful pH shifts occurring during iontophoresis. Both drug delivery and dispersive electrodes are required
- Medication (aqueous, polar, small molecular size, local effect)

Why use Iontophoresis?

**Physician**
As an alternative to injection, iontophoresis provides a non-invasive option for minimizing tissue trauma, pain, and potential for infection. Iontophoresis also eliminates the need for needle disposal, minimizing concerns over infectious disease hazards.

**Therapist/Trainer**
Iontophoresis provides clinicians unable to do injections with the opportunity to deliver drug therapy (Caution: Medication must be prescribed by a physician). Some conditions stand in the way of completing the normal rehab process. For example, inflammation may prevent the mobilizing of a joint. Without anti-inflammatory medical therapy, further manual therapies are effectively blocked by patient discomfort. The use of iontophoresis provides a cost-effective solution to accelerate the effects of the global therapy program.

**Patient**
Many patients have a low pain tolerance to injection or a history of problems associated with the injection. Iontophoresis provides a low risk, less painful alternative.

How do I get started with an Iontophoresis program?
Empi’s national network of knowledgeable sales professionals is available to provide in-services and to answer your questions. Empi also provides extensive clinical support, education, and consultation through our Corporate Professional Services and Clinical Education and Resource Center (C.E.R.C.*). Contact Empi at 800.325.5663.