

**Table 11-1****COMMONLY USED IONS FOR INTOPHORESIS**

<i>Medication</i>	<i>Therapeutic Indications</i>	<i>Polarity</i>
Lidocaine hydrochloride	Analgesia; bursitis, neuritis	+
1% & 2% Sodium salicylate	Analgesia; plantar warts	-
Hyaluronidase (Wydase)	Swelling; sprains, strains	+
Tap water	Hyperhidrosis of palms/feet	+/-
2% Copper sulfate	Antibacterial, fungicidal; athlete's foot	+
2% Acetic acid solution	Calcium deposits, calcific tendonitis myositis, ossificans; musculoskeletal conditions	-
1 mL 0.4% Decadron dexamethasone sodium phosphate	Anti-inflammatory, osteoarthritis, bursitis, tendonitis	-

ments, and the acute inflammation should also subside during that period. If the patient shows continued improvement, the treatment may continue for an additional 9 to 12 sessions if needed. Doubling the amount of medication will have no clinical significance and the treatment should be stopped if the patient is not getting at least 50% relief.

## Summary

Iontophoresis is the application of direct electrical current to enhance drug delivery of ionic drugs from aqueous solutions. Iontophoresis provides a localized concentration of a medication to the tissue while avoiding the difficulties of systemic effects. Iontophoresis can be safely and effectively used with patients who are fearful of the pain associated with intramuscular needle injections. Benefits of iontophoresing medications into specific tissues include the fact that the medication can be delivered to a larger area than for an injection. Using iontophoresis in conjunction with traditional modalities and interventions may provide quicker reduction in patient symptoms, thereby facilitating occupational function. Additionally, the treatment is repeatable, which allows for a longer period of therapeutic exposure to the medication, thereby facilitating therapeutic benefits and outcomes (Backstrom, 2002; Banta, 1994; Gudeman, Eisele, Heidt, Colosimo, & Stroupe, 1997) (Table 11-1).

## Case Study

T. S. is a 41-year-old dental assistant with a diagnosis of right lateral epicondylitis. The patient has been taking nonsteroidal anti-inflammatory drugs (NSAIDs) for the past 6 weeks before being referred to occupational therapy. The patient reports that