

# ***PROCEDURE***

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ORIGINAL DATE: 08/94

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**SUBJECT: PHONOPHORESIS (ULTRA SOUND WITH HYDROCORTISONE TRANSMISSION MEDIUM)**

## **Purpose**

1. To introduce concentrated anti-inflammatory medication into painful, inflamed subcutaneous areas, using the principles of ultra-sound technology.
2. A painless alternative to percutaneous steroid injections.
3. Benefits include analgesic and anti-inflammatory reactions.

Molecules introduced into the target must be broken into component elements and radicals by natural chemical processes and recombined with existing bloodstream radicals. Phonophoresis will be delivered to patients when specifically ordered by the physician.

## **Indications** (As below, but not limited to)

Bursitis, Tendonitis, Osteoarthritis, Adhesive Capsulitis, Traumatic Chondromalasia Fasciitis, Synovitis, (or any condition of joint pain, or soft tissue pain.)

## **Contraindications**

1. Patients where steroid use would be contraindicated.
2. Ultra-sound contraindications.

(**NOTE:** Patient should check skin area periodically, and be advised to use antihistamine skin lotion should any dermal irritation occur.)

## **Precautions**

See ultra sound precautions.

## **Procedure**

Same as ultra-sound technique with exceptions below for transmission medium, intensity, and duration of treatment. Indicate above specifically in care plan.

1. Patient obtains prescription from physician for 10% Hydrocortisone in gel base. Other medications which are known to transmit ultra-sound well are Lidex gel, betamethasone gel, and Thera-Gesic cream.
2. Spread medium thinly over area with tongue depressor or gloved finger tips, add ultra-sound gel as needed, to provide smooth application.

3. Intensity  $.5\text{w/cm}^2$  to  $1.0\text{ w/cm}^2$ . Lower intensity results in hydrocortisol concentration in nerve tissue.
4. Average treatment time 5-8 minutes, with 8-10 treatments needed to reach goals. If more are needed, a 2-week rest period is advised. Relief should be noted after 6 treatments.
5. Methods of Application: A continuous wave form with moving transducer is appropriate for flat areas. Pulsed wave form with stationary transducer is used for bony areas, and/or diagnoses in which heat is contraindicated (example: bursitis, arthritis).