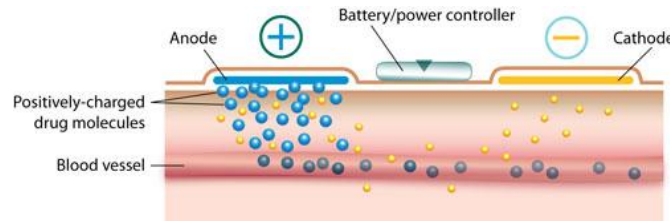


IONTOPHORESIS AND YOU

DESCRIPTION: Iontophoresis is a non-invasive method of delivering medication using an electric current that assists movement of drugs through the skin. Medications, such as dexamethasone, and the iontophoresis electrodes have charges to them, positive (also called 'anode') and negative (also called 'cathode'). The medications with the same charge as the electrode are placed together in a patch. This allows the electrode and the medication to repel each other and push the medications into the skin, blood stream and local tissues. The current can be from an external energy source using a direct current, or through the use of passive approaches of the body's own electrical charge. The treatment often takes 10 to 20 minutes, but can vary depending on treatment settings.



http://www.dddmag.com/uploadedImages/Articles/2009_12/hiw-4.jpg

PURPOSE: The purposes of Iontophoresis are to decrease pain and inflammation, act as local anesthetic and provide antibiotic effects. These effects can lead to improvements in movement when doing rehabilitation exercises.

WHAT IT IS USED FOR: Iontophoresis is used for several conditions. Here are a few examples: Carpal tunnel syndrome (numbness and pain in the wrist and fingers), Infrapatellar tendinitis (painful tendon at the knee), Plantar fasciitis (painful heel), Musculotendinous pain (pain where the muscle and tendon meet), and TMJ dysfunction (pain in the jaw located near and around the ear), and lastly Rheumatic Knee (anterior knee pain).

WHAT CAN YOU EXPECT TO FEEL: Depending on how the current is delivered, you might feel a slight tingling or prickling sensation. If you feel pain or a burning sensation, discontinue immediately and contact your Physical Therapist.

SAFETY AND REASONS TO STOP TREATMENT: It is important to be fully hydrated to assure good conductivity of the current. Iontophoresis may not be safe or indicated for individuals with skin or medication sensitivities, pacemakers, implanted electrical devices and/or cardiac conditions. Do not use over eye or chest areas. If you experience any of the following signs or symptoms please let your Physical Therapist know right away: burning, tingling, stinging, pulling sensation, redness at the site that lasts more than 1-3 hours, or any metallic taste in the mouth. When using Iontophoresis you should avoid using or being around flammable products.

ADDITIONAL INFORMATION: Please contact your Physician or Physical Therapist, or check out the resources below:

1. National Center for Biotechnology Information, U.S. National Library of Medicine. 8600 Rockville Pike, Bethesda MD, 20894 USA. <www.ncbi.nlm.nih.gov/pmc/articles/PMC2700785/>.
2. Empi Medical Information, Empi. 599 Cardigan Road, St. Paul, MN 55126-4099, USA. 1-800.328.2536. www.empi.com/healthcare_professionals/detail.aspx?id=108
3. Gurney, A. Burke, PT, and Daniel C. Wascher, MD. "Absorption of Dexamethasone Sodium Phosphate in Human Connective Tissue Using Iontophoresis." *Am J Sports Med* April 2008 36: 753 - 759; published online before print January 11, 2008 : <http://ajs.sagepub.com/search?fulltext=Iontophoresis&submit=yes&x=0&y=0>.

¹Behrens, Barbara, and Susan Michlovits. Physical Agents: Theory and Practice. Philadelphia: F.A.Davis Company, 2006.

¹ Additional resource reference for written content in this article.