



Pain MANAGEMENT

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TRENDS IN PAIN MANAGEMENT

Do magnets really work for managing pain or are they merely a placebo? An article in the *Physical Therapy Bulletin* dated January 25, 1999 reported magnet-laden socks being used to reduce the neuropathic symptoms of burning, numbness, and tingling in the feet of patients with diabetes. The symptoms were dramatically reduced in 90% of the patients with the magnetic socks, while only 33% of the control group reported improvement over this same time period. However, it is quoted that the symptoms returned when the magnets were removed.

On June 14, 1999, the San Diego Union ran an article called "Magnetic Therapy Is Becoming An Alluring Force." This story discussed the efficacy of magnets based on clinical studies and satisfied patients. In the article, pro golfer Jim Culvert "couldn't play golf without wearing his magnets." The Miami Dolphins, a pro football team, stated they cover their game bench with magnetic pads to lessen the pain from their injuries. Ron Lawrence, MD, President of the North American Academy of Magnetic Therapy was quoted in the article as saying "people are drawn to natural therapy that is safe, noninvasive, inexpensive and nonaddictive;" plus "it produces none of the side effects often seen with drugs." Magnets have successfully been used, according to the article, to reduce chronic pain caused by arthritis, carpal tunnel syndrome, headaches, menstrual cramps, tennis elbow, and bursitis, according to Dr. Lawrence. Magnetic therapy is enhanced by adding stress management plans, diet changes, exercise program, acupuncture, and/or vitamin/mineral supplementation. Additionally, "magnetic therapy is to believe to work by increasing blood flow in the capillaries of an affected area which reduces inflammation by speeding up fluid exchange." Other researchers suggest the magnetic fields produce tiny electrical current, stimulate the brain, trigger endorphin release, and/or stimulate the pineal gland to indirectly produce various enzymes. The contraindications listed to magnetic therapy are pregnancy, people using transdermal drug patches, patients with pacemakers or insulin pumps, or following an acute sprain. (I would also add to this mucosis, as a fungus in a magnetic field rapidly grows.) Dr. Lawrence is the author of "Magnetic Therapy, The Pain Cure Alternatives." He practices in Agoura, California.

Another interesting article was in *Advance for Physical Therapists and Physical Therapy Assistants* volume 10, number 20 called "Magnetic Reaction," by Scott Huelskamp. The article discussed more of Dr. Lawrence's approach, the actions of a magnet on increasing blood flow, and the potassium sodium ion exchange that also occurs in the presence of a magnetic field. The magnets described are 40 times greater in strength than your everyday refrigerator magnets. Neodymium is the latest in magnetic development and appears to have a strong magnetic field. The strength of a magnetic field is called gauss. Dr. Lawrence recommends surrounding the area of pain or placing the magnets on the associated acupuncture points.

The *Journal of Rheumatology*, 1993;20:3 reports a "Double-blind trial of clinical effects of pulse magnetic fields in osteoarthritis" by David H. Trock, et al. Results reported an average improvement of 23% to 61% with active treatment while 2% to 18% improvement was noted with the placebo group. No toxicity was observed. The conclusion was that the use of post magnetic pulse is "a potential as an effective method of improving symptoms in osteoarthritis."

I have used magnets and magnetic field therapy in my practice for the past 15 years in treating patients with chronic pain. I too was skeptical at first but with patients reporting less pain, long lasting relief, and improved mobility, some of my skepticism changed. Historically, magnetic therapy has been used for centuries in Asia, Egypt, the Middle East, and Greece. For many hundreds of years, up to the 1800s, it was believed to be "quackery." During the 1900s it was again used with horses and other animals, as a sensation to the stimulus was absent. These horses appeared to respond to the magnetic field therapy by having less pain and improved mobility. In 1994, the FDA gave an "okay" for magnetic field therapy to be used for chronic pain and chronic edema. In conclusion, there is a plethora of articles and websites out there for you to look at on magnetic therapy. Some are good control studies, others are not, and still others are based on anecdotal results. You need to interpret these results for yourself. However, there is a place for magnetic therapy as magnets are readily available through various companies and stores. Magnets are not a cure-all, as they do not cure anything. They do reduce pain and are deemed safe to use at this time.

NEW MEDICATIONS FOR PAIN

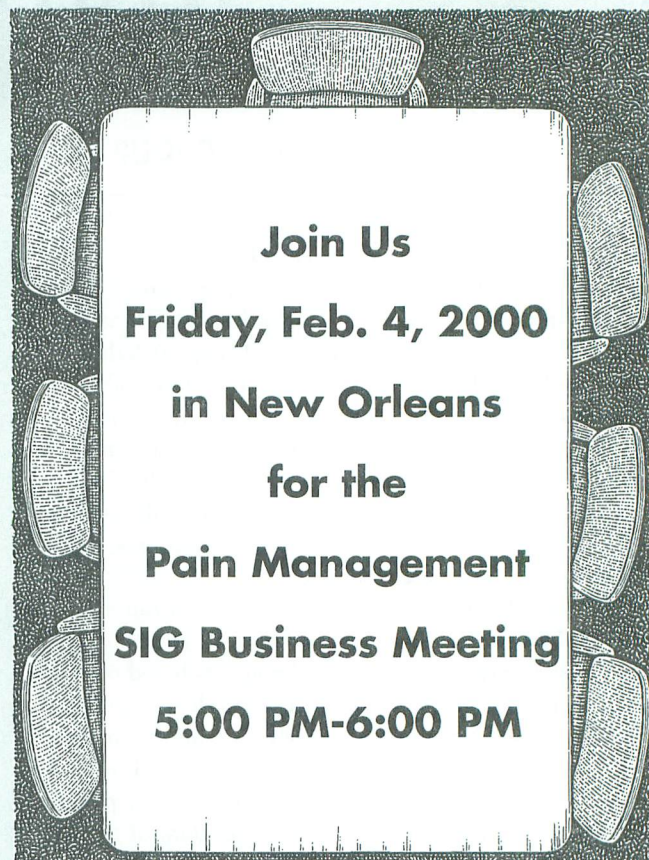
Do you have patients with chronic pain who are not improving? Do they have poor sleep, trouble with memory, and appear depressed? Neurontin (gabapentin), a drug originally tested to treat epilepsy, was found to be effective when used in the treatment of certain types of chronic pain, ie, headaches, fibromyalgia, and shingles (see *Physical Therapy Bulletin*, January 18, 1999). Gabapentin is effective in the treatment of pain and sleep interference associated with postherpetic neuralgia. (JAMA, 1998;280(21):1837 "Gabapentin for the Treatment of Postherpetic Neuralgia" Rowbotham, etc.) This drug appears to interact well with other medications and has few side effects (see PDR). Call your referring physician and discuss its potential use for your patients who do not seem to be getting better.

NUTRITIONAL SUPPLEMENTS

The FDA is reported to be doing a double-blind study on the efficacy of using chondroitin sulfate and glucosamine for the treatment of arthritis. According to the *Orthopedic Technology Review*, 1999 (April/May)1(1) "these items have been used in veterinary medicine for many, many years. Anecdotally, humans have been receiving some benefit from these nutritional supplements. Many patients report less pain, improved function, and less reliance in NSAIDs while taking glucosamine and chondroitin. Robert Schenk, MD, Professor at the University of Texas Science Center, San Antonio, believes "they give symptomatic relief but do not cure a patient. Glucosamine may also be shown to have chondro-protective qualities." The risk of using this nutritional supplement is mostly to the pocketbook. Further research is definitely needed but it may prove an alternative for some of your patients who cannot tolerate NSAIDs or other intervention techniques.

If you have questions or comments regarding any of the items listed above, please contact me through the Orthopaedic Section or at my e-mail address of painfree@ix.netcom.com.

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Friday, Feb. 4, 2000
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