

Eli's Rehab Report

Clinical Rehab Roundup

In this recurring feature, Physical Medicine & Rehab Coding Alert provides you with summaries of a cross section of recent clinical studies. Here's what's new:

Saturday Therapy Speeds Up Inpatient Rehab

"A Saturday physiotherapy service may decrease length of stay in patients undergoing rehabilitation in hospital: a randomized controlled trial." Brusco NK, Shields N, Taylor NF, Paratz J. Aust J Physiother. 2007; 53(2):75-81.

This study tested whether additional Saturday physiotherapy intervention was beneficial for inpatients undergoing rehabilitation. In a randomized controlled trial with concealed allocation, assessor blinding and intention-to-treat analysis, researchers observed 262 patients undergoing rehab in an Australian metropolitan hospital. The experimental group received physiotherapy intervention from Monday to Saturday and the control group from Monday to Friday. Primary outcomes were hospital and physiotherapy length of stay.

Findings: Researchers saw a 3.2-day reduction for the experimental group in hospital length of stay and a 2.5-day reduction in physiotherapy length of stay. No significant between-group difference appeared in change from admission to discharge for most of the secondary patient outcomes (health state, independence, activity, flexibility). The risk of not being discharged home, of having an adverse event, or requiring follow-up physiotherapy intervention was no greater for the experimental group than the control group.

Researchers concluded that providing additional Saturday physiotherapy intervention resulted in a trend to shorter hospital and physiotherapy length of stay without affecting patient outcomes unfavorably or increasing burden of care, suggesting that a larger multicenter trial is warranted.

Low-Level Laser Offers Positive Results for CTS Patients

"Effect of low-level laser therapy in rheumatoid arthritis patients with carpal tunnel syndrome." Ekim A, Armagan O, Tascioglu F, Oner C, Colak M. Swiss Med Wkly. 2007 Jun 16; 137(23-24): 347-52.

This study sought to evaluate the efficacy of low-level laser therapy (LLLT) in patients with rheumatoid arthritis (RA) with carpal tunnel syndrome (CTS). Researchers randomly assigned 19 patients with CTS to two treatment groups: LLLT (Group 1) (10 hands) with a dosage 1.5 J/ per point, and placebo laser therapy group (Group 2) (9 hands). Researchers used a gallium-aluminum-arsenide diode laser device as a source of low-power laser with a power output of 50 mW and wavelength of 780 nm. Treatments were once a day on weekdays for a total period of 10 days. Patients were evaluated on the functional status scale (FSS), visual analogue scale (VAS), symptom severity scale (SSS), and grip-strength.

Findings: Clinical and electrophysiological parameters were similar at baseline in both groups. Improvements were significantly more pronounced in the LLLT group than placebo group. A comparison between groups showed significant improvements in pain score and functional status scale score. There were no statistically significant differences in other clinical and electrophysiological parameters between groups at 3 months.

Researchers concluded that LLLT and placebo laser therapy seems to be effective for pain and hand function in CTS, thus LLLT may a good alternative treatment method in CTS patients with RA.

Try Tae Kwon Do for Geriatric Balance Training

"Tae Kwon Do: an effective exercise for improving balance and walking ability in older adults." Cromwell RL, Meyers PM,

Meyers PE, Newton RA. J Gerontol A Biol Sci Med Sci. 2007 Jun; 62(6): 641-6.

Tae Kwon Do is an exercise that trains dynamic components of balance and walking; thus, researchers hypothesized that Tae Kwon Do exercises would help older adults achieve a more stable walking pattern. Twenty participants from a Tae Kwon Do exercise class (average age 72.7 years) and 20 non-exercising controls (average age 73.8 years) participated. Researchers pre-tested and post-tested balance and walking ability for all participants using single-leg stance (SLS), Multidirectional Reach Test (MDRT), Timed Up-and-Go (TUG), walking velocity, cadence, gait stability ratio (GSR), and sit-and-reach (S&R).

Findings: Researchers found no differences between pre-test and post-test measures for nonexercising controls. Tae Kwon Do participants, however, showed significant improvements on the MDRT when reaching backward, right, and left. TUG, walking velocity, GSR, and S&R also showed significant improvement in this exercising group.

Researchers attributed Tae Kwon Do's effectiveness of improving balance and walking ability in community-dwelling older adults to movements that emphasize dynamic movement components typically deficient in the older adult walking pattern. Improving balance and walking ability through Tae Kwon Do exercise may serve to restore function that has declined with age and preserve mobility for older adults, the study concluded.