Research in the New Millennium

Acupuncture as an Adjunctive Treatment in Stroke Rehabilitation, Beth Israel Medical Center (H133G000120) led by Samuel C. Shiflett, PhD. Theresa San Agustin, MD, Project Officer.
Abstract: This project designs and evaluates safe and efficacious ways acupuncture may be used to benefit the functional recovery of survivors of stroke when used in addition to standard rehabilitation. The project directly addresses the medical, cognitive, and psychological sequelae of stroke, and addresses which acupuncture points and model to use, when to start acupuncture, and the use of electroacupuncture. The project also compares acupuncture with and without electrical stimulation in stroke treatment.
Find out more at: www.healthwellness.org

Rehabilitation Research and Training Center: Health and Wellness Consortium, Oregon Health and Science University (H133B990019) led by Gloria Krahn, PhD. Theresa San Agustin, MD, Project Officer.
Abstract: The Center has a comprehensive program of research, training, technical assistance, and dissemination with primary attention given to the physical and mental aspects of health for people with long-lasting disabilities such as cerebral palsy, SCI, multiple sclerosis, amputation, and post-polio. Interconnected research areas include evaluating health assessment definitions, practices, policies, and measurement, and their impact on health promotion and investigating the relationship between selected health maintenance strategies and the incidence and severity of secondary conditions and other functional outcomes. An additional research focus is the use and efficacy of complimentary alternative medicine among people with these specific long-term disabilities.
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Off the Shelf

Physical Therapy, 81(10), October 2001, focuses on evidence-based clinical practice guidelines on selected rehabilitation interventions for low back pain, knee pain, neck pain, and shoulder pain. These interventions include thermotherapy, therapeutic massage, therapeutic exercises, electromyographic (EMG) biofeedback, mechanical traction, ultrasound, transcutaneous electrical nerve stimulation (TENS), electrical stimulation, and combined rehabilitation interventions. These practices and guidelines were developed by the Philadelphia Panel (9 clinical specialty experts and the Ottawa Methods Group). Selected articles from this issue are available through NARIC, accession numbers J43126 (low back pain), J43127 (knee pain), J43128 (neck pain), and J43128 (shoulder pain).

New Research

Selections from REHABDATA

Abstract: Randomized, controlled study examining effects of acupuncture and transcutaneous electrical nerve stimulation (TENS) on functional outcome and quality of life after stroke. Results show that groups were similar in all prognostic measures at baseline, and there were no statistically significant differences in outcome variables at 3-month or 1-year follow-up.

Abstract: Study presenting results of a survey of occupational therapy (OT) practitioners regarding their views on the therapeutic use of humor and their own practices involving use of therapeutic humor. Results indicate that respondents with more years in the profession and respondents who worked more hours were more likely to report using jokes or funny stories in OT practice.

Abstract: Study examining the effect of Chinese shadow boxing (Tai Chi Chuan) on static and dynamic postural stability of older adults. Results indicate that participants who regularly practiced Tai Chi Chuan showed better postural stability in more challenging conditions, such as the condition with simultaneous disturbance of vision and proprioception, compared to the group that did not practice Tai Chi Chuan.

RehabWire for May discusses alternative and complimentary therapies in rehabilitation. These therapies include acupuncture and acupressure, holistic medicine, massage, and homeopathy.

Visit the National Clearinghouse on Complimentary and Alternative Medicine at NIH: www.nccam.nih.gov

Abstract: Article on nutritional, herbal, and alternative approaches to the prevention of prostate disorders. The article discusses beneficial and harmful foods and nutrients such as milk, tomatoes, fructose, zinc, and others; herbal remedies such as saw palmetto, pygeum, and homeopathy.


Abstract: Article discussing the author’s career as a researcher into the use of biofeedback in rehabilitation. The author first discusses his early studies in single motor unit control. He then discusses his studies of the role of EMG feedback in predicting successful outcomes in upper extremity use and in ambulatory capabilities among patients with chronic stroke, including the application of these findings to "forced use" or "constraint-induced movement therapy.” Finally, the author discusses his investigations into center of pressure feedback using computerized balance machines, which resulted in a series of experiments that ultimately led to the finding that Tai Chi as an exercise form for older adults can have a substantially favorable effect in delaying the onset of falls.


Abstract: Textbook providing comprehensive coverage of alternative and complementary medicine. The first part of the text discusses the mind-body connection, psychoneuroimmunology, and the effects of social interactions on health. Subsequent chapters cover specific therapies. For each therapy, the text discusses its history, philosophy, mechanisms, research evidence, methods, and indications and contraindications.


Abstract: Volume on complementary and alternative medicine, including its history, its social and cultural context, its relation to conventional medicine, and characteristics and research support of specific therapies, medical approaches, and traditional medical systems.


Abstract: Article on spasticity and traumatic brain injury. Topics surveyed include neuroanatomy of neuronal control, pathophysiology of the upper motor neuron syndrome, and treatment. Treatment modalities discussed include positioning, cold and heat, electrical stimulation and vibration, massage, casting and splinting, nerve blocks, botulinum toxin therapy, neurosurgery, orthopedic surgery, and pharmacotherapy (benzodiazepines, baclofen, dantrolene sodium, clonidine, tizanidine, intrathecal medications, and other medications).


Abstract: Article reviewing research evidence concerning the efficacy of needling (dry needling or acupuncture and wet needling or drug injection) as a treatment for myofascial trigger point pain. Twenty-three papers were identified, but it was found that no studies were of sufficient quality or adequate design to test the efficacy of any needling technique beyond placebo in the treatment of myofascial pain.


Abstract: Study to determine the effectiveness of acupuncture and Trager Psychophysical Integration (a form of manual therapy) in decreasing chronic shoulder pain in wheelchair users with spinal cord injury. It was found that both treatments resulted in improvements in performance-corrected Wheelchair User’s Shoulder Pain Index scores, which were maintained during the 5-week posttreatment follow-up period.


Abstract: Article presenting a quasi-experimental study to determine the effects of three consecutive days of slow stroke back massage (SSBM) on 24 adult patients in a rehabilitation hospital. The Huckstadt Touch Instrument assesses physiological and psychological responses to touch, as well as the recipients’ perceptions of touch. A significant decrease is noted in systolic and diastolic blood pressure after SSBM on all 3 days. The mean heart rate and the mean respiratory rate show a significant decrease on days 1 and 3. No psychological change is noted, however, perception scores indicate a positive response to SSBM.


Abstract: Book on alternative medicine therapies for symptoms of multiple sclerosis (MS), with information about treatment methods, study results, side effects, and other practical information. Therapies discussed include acupuncture and traditional Chinese medicine, bee venom therapy, biofeedback, cooling therapy, craniosacral therapy, diets and fatty acid supplements, enzyme therapy, exercise, Feldenkrais, herbs, homeopathy, hypnosis and guided imagery, magnets and electromagnetic therapy, music therapy, neurolan, pets, the Pilates method and the Physicalmind method, reflexology, tai chi, therapeutic touch, reduction of toxin exposure (clinical ecology), Tragerwork, vitamins and minerals, and yoga. Also includes discussions of the placebo effect, psychoimmunology, and precautions when using complementary and alternative medicine.