Attention Deficit Disorder

Abstract: Twenty-eight adolescents with attention deficit hyperactivity disorder were provided either massage therapy or relaxation therapy for 10 consecutive school days. The massage therapy group, but not the relaxation therapy group, rated themselves as happier and observers rated them as fidgeting less following the sessions. After the 2-week period, their teachers reported more time on task and assigned them lower hyperactivity scores based on classroom behavior.

Autism

Abstract: Autism affects 2 to 5 of 10,000 children. Although once considered primarily psychiatric in nature, autism is now generally thought to be an organic defect in brain development. Characterized by a failure to develop language or other forms of social communication, symptoms of autism include (a) withdrawal from or failure to develop normal relationships with people; (b) abnormal responses to one or more types of sensory stimuli (usually sound); (c) atypical movement, including immobility and hyperkinesis; (d) limited attention span and excessive off-task behavior; and (e) touch aversion. A variety of therapies have been tried with autistic children including structured activities, behavior modification, sensorimotor, and sensory integrative approaches. Touch therapy may also be beneficial for autistic children. Previous studies, for example, have shown that touch therapy alleviated anxiety and decreased cortisol levels and depression in child psychiatric patients (Field et al., 1992). In another study, vagal activity increased during touch therapy (Field, 1990). Since increased vagal activity has been associated with increased attention span (Porges, 1991), touch therapy may reduce the off-task behavior noted in children with autism. This study investigated the effects of touch therapy on three problems commonly associated with autism including inattentiveness (of-task behavior), touch aversion, and withdrawal.

Back Pain

Massage therapy is frequently employed for low back pain. The aim of this systematic review was to find the evidence for or against its efficacy in this indication. Four randomized clinical trials were located in which massage was tested as a monotherapy for low back pain. All were burdened with major methodological flaws. One of these studies suggests that massage is superior to no treatment. Two trials imply that it is equally effective as spinal manipulation or transcutaneous electrical stimulation. One study suggests that it is less effective than spinal manipulation. It is concluded that too few trials of massage therapy exist for a reliable evaluation of its efficacy. Massage seems to have some potential as a therapy for low back pain.

Cancer
Ferrell-Torry, A. T. and Glick, O. J. The use of therapeutic massage as a nursing intervention to modify anxiety and the perception of cancer pain. [Review] [41 refs]. Cancer Nursing, 16(2), 93-101. 4-1993.

Abstract: The purpose of this exploratory study was to examine the effects of therapeutic massage (consisting of effleurage, petrissage, and myofascial trigger point therapy) on pain perception, anxiety, and relaxation levels in hospitalized patients experiencing significant cancer pain. Thirty minutes of therapeutic massage was administered on two consecutive evenings to nine hospitalized males
diagnosed with cancer and experiencing cancer pain. The subjects' self-reports of pain and relaxation (measured by Visual Analogue Scales) as well as anxiety (measured by the Spielberger State Anxiety Inventory) were recorded before and immediately after the intervention. The objective physiologic measures of heart rate, respiratory rate, and blood pressure were obtained before, immediately after, and, finally, 10 min after the massage intervention. Massage therapy significantly reduced the subjects' level of pain perception (average = 60%) and anxiety (average = 24%) while enhancing their feelings of relaxation by an average of 58%. In addition to these subjective measures, all physiological measures (heart rate, respiratory rate, and blood pressure) tended to decrease from baseline, providing further indication of relaxation. In conclusion, although the exact mechanism is not known, therapeutic massage is a beneficial nursing intervention that promotes relaxation and alleviates the perception of pain and anxiety in hospitalized cancer patients. [References: 41]

Cullen, C., Hernandez-Reif, M. & Field, T. Pediatric Oncology Patients Benefit from Massage Therapy.

Abstract: Twenty children with leukemia were provided daily massage therapy by their parents and were compared to a control group. Massage therapy decreased distress behavior during medical procedures and increased natural killer cell number and activity.

Cardiovascular

Abstract: This study determined the effect of massage on oxygen consumption at rest. Ten healthy, adult males (mean age = 28 years) volunteered to serve as subjects. During the Control Session, each subject was placed in the supine position on a massage table to remain motionless for 30 minutes. During the Treatment Session, each subject received a 30-minute sports massage of the lower extremities. Oxygen consumption was determined via the Beckman Metabolic Measurement Cart, which was upgraded to estimate cardiac output using the CO2 rebreathing (equilibrium) method. Paired t-tests were used for all tests of statistical significance. There was no significant difference in the subjects' oxygen consumption with the massage. Also, there were no significant differences in heart rate, stroke volume, cardiac output, and arteriovenous oxygen difference during the massage. These findings indicate (1) that massaging the lower extremities results in neither an increase nor a decrease in the subjects' expenditure of energy at rest and (2) that the energy cost of metabolism at rest is determined by the same central and/or peripheral adjustments.


Abstract: OBJECTIVE: To examine the effect of a change in body position (right or left lateral) and timing of backrub (immediate or delayed) on mixed venous oxygen saturation in surgical ICU patients.

METHODS: A repeated-measures design was used to study 57 critically ill men. Mixed venous oxygen saturation was recorded at 1-minute intervals for 5 minutes in each of three periods: baseline, after turning, and after backrub. Subjects were randomly assigned to body position and timing of backrub. Subjects in the immediate-backrub group were turned and given a 1-minute backrub. Mixed venous oxygen saturation was measured at 1-minute intervals for 5 minutes at two points: after the backrub and then with the patient lying on his side. For subjects in the delayed-backrub group, saturation was measured at 1-minute intervals for 5 minutes at two different points: after the subject was turned to his side and after the backrub.

RESULTS: Both position and timing of backrub had significant effects on mixed venous oxygen saturation across conditions over time. Subjects positioned on their left side had a significantly greater decrease in saturation when the backrub was started. At the end of the backrub, saturation was significantly lower in subjects lying on their left side than in subjects lying on their right
side. The pattern of change differed according to the timing of the backrub, and return to baseline levels of saturation after intervention differed according to body position. CONCLUSIONS: Two consecutive interventions (change in body position and backrub) cause a greater decrease in mixed venous oxygen saturation than the two interventions separated by a 5-minute equilibration period. Turning to the left side decreases oxygen saturation more than turning to the ride side does. Oxygen saturation returns to clinically acceptable ranges within 5 minutes of an intervention. In patients with stable hemodynamic conditions, the standard practice of turning the patient and immediately giving a backrub is recommended. However, it is prudent to closely monitor individual patterns of mixed venous oxygen saturation, particularly in patients with unstable hemodynamic conditions.

**Cerebral Circulation**

Abstract: Clinical and instrumental studies have revealed differences in effects of nerve ending and classic massage on hemodynamics in 41 patients early after transitory ischemic attacks in the vertebrobasilar area. Point massage produced more potent vasotropic effect, contraindications to it are minimal. It can be considered as a pathogenetic therapy aimed at correction of cerebral circulation in patients with vertebrobasilar area applicable early after acute cerebrovascular episodes.

**Chronic Fatigue Syndrome**

Abstract: Twenty chronic fatigue syndrome subjects were randomly assigned to a massage therapy or a SHAM TENS (transcutaneous electrical stimulation) control group. Immediately following the massage therapy versus SHAM TENS on the first and last days of the study the massage therapy group had lower depression and anxiety scores and lower cortisol levels. Longer-term effects (last day versus first day) suggested that the massage therapy versus SHAM TENS group had lower depression, emotional distress and somatic symptom scores, more hours of sleep and lower epinephrine and cortisol levels.

**EEG**

Abstract: Previous research has documented differences in the pattern of EEG activation between 3-month-old infants of depressed mothers and infants of nondepressed mothers. In the present study, EEG was recorded in even younger 1-month-old infants of depressed and nondepressed mothers. The infants of depressed mothers exhibited greater relative right frontal EEG asymmetry (due to reduced left frontal activation), and this pattern at 1 month was significantly related to 3-month EEG asymmetry. Right frontal EEG asymmetry was also related to more frequent negative facial expressions (sad and pre-cry faces) during the Brazelton exam. Finally, the infants of depressed mothers showed more indeterminate sleep; were less active, and cried less than infants of nondepressed.

**Elderly**
Abstract: An experimental design was used to measure the effects of back massage on anxiety levels of elderly residents in a long-term care institution. Twenty-one residents, 17 females and four males, participated in the study. Subjects were randomly assigned to three groups which received 'back massage with normal conversation', 'conversation only' and 'no intervention' respectively. The dependent variable, anxiety, was measured prior to back massage, immediately following, and 10 minutes later, on four consecutive evenings. The Spielberger Self-Evaluation Questionnaire (STAI), electromyographic recordings, systolic blood pressure, diastolic blood pressure (DBP) and heart rate were used as measures of anxiety. Analysis of variance was used to examine differences in group mean scores over the pre-test to post-test, post-test to delayed time interval, and pre-test to delayed time intervals, Scheffe comparisons being made where indicated. With the exception of mean DBP which showed no change from pre-test to post-test and HR which increased from post-test to delayed time interval, there was a statistically insignificant decrease in mean scores on all variables in the back massage group from pre-test to post-test and from post-test to delayed time interval. There was a statistically significant difference in the mean anxiety (STAI) score between the back massage group and the no intervention group. The difference between the back massage group and the conversation only group approached statistical significance. (ABSTRACT TRUNCATED AT 250 WORDS)

Field, T., Hernandez-Reif, M., Quintino, O., Schanberg, S. & Kuhn, C. Elder Retired Volunteers Benefit from Giving Massage Therapy to Infants. Journal of Applied Gerontology, 17, 229-239.

Abstract: This exploratory within-subjects study compared the effects of elder retired volunteers giving massage to infants with receiving massage themselves. Three times a week for 3 weeks, 10 elder volunteers (8 females, mean age=70 years) received Swedish massage sessions. For another 3 weeks, three times per week, the same elderly volunteers massaged infants at a nursery school. Receiving massage first versus giving massage first was counterbalanced across subjects. Immediately after the first-and last-day sessions of giving massages, the elder retired volunteers had less anxiety and depression and lower stress hormones (salivary cortisol) levels. Over the 3-week period, depression and catecholamines (norepinephrine and epinephrine) decreased and lifestyle and health improved. These effects were not as strong for the 3-week period when they received massage, possibly because the elder retired volunteers initially felt awkward about being massaged and because they derived more satisfaction massaging the infants.

Endorphins

Abstract: We conducted this study to evaluate the effect of massage on the levels of endogenous opiates in peripheral venous blood. The results were based on findings from 21 healthy, adult volunteers. After separation by sex, the volunteers were assigned randomly to either the Control Group (n = 11) that rested but received no massage or the Experimental Group (n = 10) that received a 30-minute complete back massage. We found no significant pretreatment or posttreatment difference in blood beta-endorphin or beta-lipotropin levels between the groups. The results indicate that massage did not change significantly the measured serum levels of beta-endorphin or beta-lipotropin in our healthy subjects without pain. A follow-up study using patients experiencing acute or chronic back pain is recommended. Massage is used routinely in the treatment of such patients, and endogenous opiates are recognized as a possible mechanism for pain relief.

Exercise
Abstract: It is evident that the literature on this subject is far from extensive. We have examined the literature with respect to influence of massage on individual physiological parameters, physical performance and recovery, and some psychological variables. Although we noted that massage had some modest effects on local blood flow, there is no evidence that these effects can be directly translated into improved performance. Indeed, the literature on performance in this regard is equivocal at best and not at all supportive if viewed more conservatively. Likewise, the literature does not support the widely held notion that recovery from exercise is enhanced by various forms of massage. We do note, however, that there is a considerable body of anecdotal reports that attest to the contribution massage makes to the feeling of well-being of many participants. At this juncture there is no way of knowing how, if at all, this feeling influences performance. An example of this is the positive manner in which massage appears to influence mood state. An argument against this apparent effect is the lack of any strong support for a positive effect of massage on performance. Although we found no compelling evidence that massage has any major impact on exercise performance or recovery, this does not mean that positive effects are not forthcoming from this intervention, but rather that they simply have not been demonstrated. Since there are no reports that massage is deleterious in any way, it would seem that its continued use would not be totally inappropriate, so long as it is clear that the intent is palliative.


Abstract: Delayed onset muscle soreness is a frequent problem after unaccustomed exercise. No universally accepted treatment exists. Massage therapy is often recommended for this condition but uncertainty exists about its effectiveness. To determine whether post-exercise massage alleviates the symptoms of delayed onset muscle soreness after a bout of strenuous exercise various computerised literature searches were carried out and located seven controlled trials. Most of the trials were burdened with serious methodological flaws, and their results are far from uniform. However, most suggest that post-exercise massage may alleviate symptoms of delayed onset muscle soreness. Massage therapy may be a promising treatment for this state.


Abstract: The effect of a combination of a warm-up, stretching exercises and massage on subjective scores for delayed onset muscle soreness (DOMS) and objective functional and biochemical measures was studied. Fifty people, randomly divided in a treatment and a control group, performed eccentric exercise with the forearm flexors for 30 min. The treatment group additionally performed a warm-up and underwent a stretching protocol before the eccentric exercise and massage afterwards. Functional and biochemical measures were obtained before, and 1, 24, 48, 72 and 96h after exercise. The median values at the five post-exercise time points differed significantly for DOMS measured when the arm was extended (p=0.043). Significant main effects for treatment were found on the maximal force (p=0.026), the flexion angle of the elbow (p=0.014) and the creatine kinase activity in blood (p=0.006). No time-by-treatment interactions were found. DOMS on pressure, extension angle, and myoglobin concentration in blood did not differ between the groups. This combination of a warm-up, stretching and massage reduces some negative effects of eccentric exercise, but the results are inconsistent, since some parameters were significantly affected by the treatment whereas others were not, despite the expected efficacy of a combination of treatments. The objective measures did not yield more unequivocal results than the subjective DOMS scores.

Facial
Abstract: Measured changes in emotion, level of arousal, and facial skin state, assessing 24 female undergraduates by the use of 3 types of checklists. The results of 2 adjective checklists indicated that on items of both general deactivation and deactivation-sleep factors, many subjective rating scores were heightened after the facial esthetic massage and that for most SS in the experimental group showed that the subjective state of their faces was much improved. It is concluded from these results that the facial esthetic massage seemed to make the S feel better.

Father Infant Massage

Fibromyalgia

Abstract: Thirty adult fibromyalgia syndrome subjects were randomly assigned to a massage therapy, a transcutaneous electrical stimulation (TENS), or a transcutaneous electrical stimulation no-current group (Sham TENS) for 30-minute treatment sessions two times per week for 5 weeks. The massage therapy subjects reported lower anxiety and depression, and their cortisol levels were lower immediately after the therapy sessions on the first and last days of the study. The TENS group showed similar changes, but only after therapy on the last day of the study. The massage therapy group improved on the dolorimeter measure of pain. They also reported less pain the last week, less stiffness and fatigue, and fewer nights of difficult sleeping. Thus, massage therapy was the most effective therapy with these fibromyalgia patients.

Genetics

Abstract: Data from the rat model suggests that a gene for growth needs to be triggered by touch for growth to occur.

H-Reflex

Abstract: An investigation of the effect of a six-minute manual muscle massage on the excitability of the spinal reflex pathway in 20 able-bodied subjects was undertaken. H-reflex recordings were obtained from the right soleus muscle, which was the site being massaged. Skin temperature and antagonist activity were monitored in an attempt to explain the changes observed in a previous study. The experimental paradigm chosen was an A-B-A interrupted-time series design consisting of two pretreatment, two treatment (massage), and two posttreatment conditions. H-reflex amplitudes recorded during both massage conditions (.76+-.58 mV, .76 +/- .61 MV) were significantly reduced (F5,90=69.04, p less than .01) in comparison to all other (before and after) conditions (2.58 +/- .75 mV, 2.56 +/- .71 mV, 2.82 +/- 1.14 mV, and 2.89 +/- .82 mV, respectively). This decrease could not be explained conclusively by changes in skin temperature, nerve conduction velocity, or antagonist recruitment, thus indicating a decrease in spinal reflex excitability attributed to massage. These findings also support our earlier report, which stated that H-reflex amplitudes are reduced only during the period of tissue manipulation, regardless of the duration of the massage.
Headache

Abstract: Massage and Acupression have a history of many years of use by the Vietnamese people in the treatment of diseases, and they can give wonderful therapeutic effects in painful syndromes and chronic diseases, etc. On the other hand, some methods of Chrono-Acupuncture based on chronobiological theory and the holistic concept of traditional medicine are studied and applied in clinical applications. This paper presents the therapy advice system based on Chrono-Massage and Acupression using the method of ZiWuLiuZhu called CHROMASSI. The system includes four major parts. Massage and Acupression Teaching: This part can provide the user with some background in Massage and Acupression theory such as the pathology of the meridians, the classification of points and their function, the therapeutic properties of points, the methods of Massage and Acupression (including Pression, Friction, Rubbing, Light Massage, Pettrissage, Rolling and Rubbing, Percussion and Vibration), and the direction of the meridians circulation, displaying AcuPoints represented by color pictures of the 12 main meridians and 2 vessels. More than 330 popular AcuPoints are used in the system. Open AcuPoint Calculating: This module can help us to calculate open AcuPoints based on data about days, months, years and hours using the special method of ZiWuLiuZhu. The Points adopted by ZiWuLiuZhu are the Five Shu Points and Source Points including 66 points (all of them are located below the elbows and knees). The effectiveness of these points becomes particularly evident when they are needled or punctured at optimum time intervals. For example, at 9:00 a.m., September 22, 1994, the open Points by the ZiWuLiuZhu method will be the points K2 (Nhien Coc) and K10 (Am Coc). According to the chronotherapeutic method, first we have to pressure (or puncture) the above points in order to attain the sensation RDac KhiS (arrival of energy), then pressure the other treating points as in ordinary Massage and Acupression. Therapy Consultation: Knowledge of the system was provided by Prof. Nguyen Van Thang and Doctor Nguyen Nhu Oanh at the Vietnam National Institute of Oriental Medicine.

CHROMASSI is able to advise on ways to treat about 153 diseases and symptoms in the following fields: Aches and Pains, Insomnia, Common Cold and Influenza, Sexual Disturbances, Medical Aesthetics in Face, Breast and Buttock, Hygiene, Cardio-Vascular Tract, Digestive Tract, Urinary Tract, Respiratory Tract, Genital Tract, Ear-Nose-Throat Tract, Nervous Tract. The system can provide information about Remarks, Acupoints formulas for treating by Massage and Acupression with colour pictures of meridians. Explanation: The CHROMASSI system can explain why the AcuPoints are used for treating diseases based on the theoretical bases of traditional Vietnamese medicine and on the meridians and collaterals system theory. The colour pictures representing the circulation of vital energy in the meridians are used for explanation. The CHROMASSI system was developed in TURBO-PROLOG and TURBO-PASCAL and can run on IBM PC/AT computers and compatibles. The system can be used for teaching and for clinics of Massage and Acupression combined with Chronotherapeutics. At present the system is used by some physicians for clinical applications. The first results indicate that, in 20 cases of generalized headache compared with the control group, the combining of chronocapreession using the ZiWuLiuZhu method and ordinary Massage and Acupression gave better effects than that obtained by either method alone.


Abstract: Twenty six adults with migraine headaches were randomly assigned to a massage therapy group, which received twice-weekly 30-minute massages for five consecutive weeks, or a wait-list control group. The massage group reported fewer distress symptoms, less pain, more headache free days, fewer sleep disturbances and taking fewer analgesics and also increased serotonin.
HIV

**Abstract:** Twenty-nine gay men (20 HIV+, 9 HIV-) received daily massages for one month. A subset of 11 of the HIV+ subjects served as a within subject control group (one month with and without massages). Major immune findings for the effects of the month of massage included a significant increase in Natural Killer Cell number, Natural Killer Cell Cytotoxicity, soluble CD8, and the cytotoxic subset of CD8 cells. There were no changes in HIV disease progression markers (CD4, CD4/CD8 ratio, Beta-2 microglobulin, neopterin). Major neuroendocrine findings, measured via 24 hour urines included a significant decrease in cortisol, and nonsignificant trends toward decrease of catecholamines. There were also significant decreases in anxiety and increases in relaxation which were significantly correlated with increases in NK cell number. Thus, there appears to be an increase in cytotoxic capacity associated with massage. Implications for HIV+ men as those with other illnesses, particularly cancer, are discussed.


**Abstract:** Assigned randomly 28 neonates born to HIV-positive mothers to a massage therapy or control group. The treatment infants were given three 15-minute massages daily for 10 days. The massaged group showed superior performance on almost every Brazelton newborn cluster score and had a greater daily weight gain at the end of the treatment period unlike the control group who showed declining performance.

Hospice

**Abstract:** This study was done to investigate a nonpharmacological means of relaxation with 30 hospice clients. The purpose was to examine the effects of slow stroke back massage (SSBM) on systolic and diastolic blood pressure, heart rate and skin temperature. SSBM was associated with decreases in systolic BP, diastolic BP, and heart rate and with an increase in skin temperature. SSBM was shown to produce modest clinical, but statistically significant changes in vital signs which were indicative of relaxation. It is a cost-effective treatment which adds to the comfort of hospice clients.

Hypertension
Infants

**Abstract:** Forty-full term 1- to 3-month-old infants born to depressed adolescent mothers who were low socioeconomic status (SES) and single parents were given 15 minutes of either massage (*n* = 20) or rocking for 2 days per week for a 6-week period. The infants who experienced massage therapy compared to infants in the rocking control group spent more time in active alert and active awake states, cried less, and had lower salivary cortisol levels, suggesting lower stress. After the massage versus the rocking sessions, the infants spent less time in an active awake state, suggesting that massage may be more effective than rocking for inducing sleep. Over the 6-week period, the massage-therapy infants gained more weight, showed greater improvement on emotionality, sociability, and soothability
temperament dimensions and had greater decreases in urinary stress catecholamines/hormones (norepinephrine, epinephrine, cortisol).


**Abstract:** It is well established that sensory stimulation is of great importance for the growth of and for the physiological and psychological development of infants. Supplementary sensory stimulation such as non-nutritive sucking and tactile stimulation has been shown to increase the growth rate and the maturation of premature infants. In human neonates non-nutritive sucking has a vagally mediated influence on the levels of some gastrointestinal hormones. In animal experiments afferent electrical stimulations of the sciatic nerves at low intensity leads to an activation of the vagal nerves and to a consequent release of vagally controlled gastrointestinal hormones such as gastrin and cholecystokinin. We therefore assume that both non-nutritive sucking and tactile stimulation trigger the activity of sensory nerves which leads to a release of vagally regulated gut hormones. Since gut hormones stimulate gastrointestinal motor and secretory activity and the growth of the gastrointestinal tract, and enhance the glucose-induced insulin release, they may contribute to the beneficial effects on maturation and growth caused by sensory stimulation. In the breast-feeding situation, the sucking of the child elicits similar reflexes in the mother leading to an activation of the maternal gut endocrine system and a consequent increase in energy uptake. These data indicate that many types of neurogenic reflexes induced in mother-infant interactions are of importance for the energy economy of both mother and child.


**Abstract:** Human mothers, fathers, and infants have a wide range of adaptability. Modern adaptations in the care of parents and newborn infants may have considerable cost. The studies reported here have yielded valuable biobehavioral findings, but they do not necessarily suggest what should be recommended behavior in our industrialized society. The striking similarity of some of the touching and physical contact behaviors across many cultures other than our own suggests that these behaviors may have biological survival value and may more often be linked to generalizable physiological or biological principles. Explorations of other biological systems associated with the behavior of hunters and gatherers as well as the almost universal practices in agricultural societies may provide a valuable guide to creative and novel studies of touch and human contact that could further benefit mothers, fathers, and infants throughout the world.


**Abstract:** Replicated a study by F. A. Scafidi et al. 40 preterm infants were assigned to treatment and control groups. 20 treatment infants received tactile/kinesthetic stimulation for 3 15-min periods during 3 consecutive hrs/day for a 10-day period. Sleep/wake behavior was monitored and Brazelton Neonatal Assessment Scale (NAS) assessments were performed at the beginning and the end of the treatment period. The treated Ss averaged a 21% greater weight gain per day and were discharged 5 days earlier. There were no significant differences in sleep/wake states and activity level between the groups. Treated Ss' performance was superior on the habituation cluster items of the Brazelton.

Abstract: Australian families with 1st babies were studied for effects of a 4-wks-postpartum training program (demonstration of baby massage and the Burleigh Relaxation Bath technique), with emphasis on the father-infant relationship. 16 families were assigned to the treatment group, and 16 served as controls. At the 12-wk home observation, treatment group infants greeted their fathers with more eye contact, smiling, vocalizing, reaching, and orienting responses and showed less avoidance behaviors. In a 10-min observation, the treatment group fathers showed greater involvement with their infants.


Abstract: Data are reviewed on the effects of massage therapy on infants and children with various medical conditions. The infants include: premature infants, cocaine-exposed infants, HIV-exposed infants, infants parented by depressed mothers, and full-term infants without medical problems. The childhood conditions include: abuse (sexual and physical), asthma, autism, burns, cancer, developmental delays, dermatitis (psoriasis), diabetes, eating disorders (bulimia), juvenile rheumatoid arthritis, posttraumatic stress disorder, and psychiatric problems. Generally, the massage therapy has resulted in lower anxiety and stress hormones and improved clinical course. Having grandparent volunteers and parents give the therapy enhances their own wellness and provides a cost-effective treatment for the children. [References: 23]

Lower Back Pain

Abstract: Massage therapy is frequently employed for low back pain (LBP). The aim of this systematic review was to find the evidence for or against its efficacy in this indication. Four randomized clinical trials were located in which massage was tested as a monotherapy for LBP. All were burdened with major methodological flaws. One of these studies suggests that massage is superior to no treatment. Two trials imply that it is equally effective as spinal manipulation or transcutaneous electrical stimulation (TES). One study suggests that it is less effective than spinal manipulation. It is concluded that too few trials of massage therapy exist for a reliable evaluation of its efficacy. Massage seems to have some potential as a therapy for LBP. More investigations of this subject are urgently needed.


Abstract: Forty patients with acute mechanical low-back pain were treated in a double-blind manner with either Rado-Salil or placebo for 14 days. Statistically significant improvements in spontaneous pain, muscular contracture and in both the patient's and physician's opinions occurred by day 3. These improvements persisted at day 14 and, in addition, there were statistically significant improvements in the finger-floor distance and the degree of lumbar extension. Treatment with Rado-Salil also allowed significant reduction in the use of oral analgesics. Only a few localized transient side-effects, requiring no specific treatment, were observed.


Abstract: STUDY DESIGN. A randomized prospective trial of manipulation, massage, corset and transcutaneous muscle stimulation (TMS) was conducted in patients with subacute low back pain. OBJECTIVES. The authors determined the relative efficacy of chiropractic treatment to massage, corset,
and TMS. SUMMARY OF BACKGROUND DATA. Although all of these treatments are used for subacute low back pain treatment, there have been few comparative trials using objective outcome criteria. Patients were enrolled for a period of 3 weeks. They were evaluated once a week by questionnaires, visual analog scale, range of motion, maximum voluntary extension effort, straight leg raising and Biering-Sorensen fatigue test. The dropout rate was highest in the muscle stimulation and corset groups and lowest in the manipulation group. Rates of full compliance did not differ significantly across treatments. A measure of patient confidence was greatest in the manipulation group. RESULTS. After 3 weeks, the manipulation group scored the greatest improvements in flexion and pain while the massage group had the best extension effort and fatigue time, and the muscle stimulation group the best extension. CONCLUSION. None of the changes in physical outcome measures (range of motion, fatigue, strength or pain) were significantly different between any of the groups.

Hernandez-Reif, M., Field, T., Krasnegor, J., and Theakston, H. Lower Back Pain is Reduced Following Massage and Relaxation Therapies.

Abstract: Twenty-four adults with lower back pain were randomly assigned to a massage therapy or a progressive muscle relaxation group. Sessions were 30 minutes long and were conducted twice a week for five weeks. By the end of the study, the massage therapy group showed improved range of motion and reported lower anxiety, improved mood, less disturbed sleep and less pain. They also had lower depression scores and higher serotonin levels by the end of the 5 week massage therapy period.