

Samples of Journal Abstracts

1

Sapir-Weise, R., Berglund, M., Frank, A., and Kristenson, H. (1999) Acupuncture in Alcoholism Treatment: A Randomized Out-Patient Study. *Alcohol & Alcoholism Vol. 34, No. 4 pp. 629-635, 1999.*

Seventy-two alcoholics were treated with acupuncture to the ear in a randomized single-blind controlled design over 10 weeks. Orthodox points and incorrect points 3–5 mm from orthodox points were used. No initial differences were found regarding social characteristics, the responses to the Swedish version of the Alcohol Use Inventory and the Three-dimensional Personality Questionnaire, indicating a successful randomization. There were non-significant tendencies towards gender differential response after acupuncture treatment ($P = 0.07$). There was no difference in the number of drinking days or level of craving between treatment and control patients. Among females, those in the treatment group reported reduction of anxiety after 1 month, more often than those in the control group ($P < 0.05$). Response to acupuncture was not related to personality or drinking pattern. Patients' experience of needle placement was similar in the study and control groups. The effects of acupuncture were less pronounced than those previously reported.

2

Avants, K., Margolin, A., Holford, T., Kosten, T. (2000) A Randomized Controlled Trial of Auricular Acupuncture for Cocaine Dependence. *Arch Intern Med. 2000;160:2305-2312*

Background: Partly because of a lack of a conventional, effective treatment for cocaine addiction, auricular acupuncture is used to treat this disorder in numerous drug treatment facilities across the country for both primary cocaine-dependent and opiate-dependent populations. Objective: To evaluate the effectiveness of auricular acupuncture for the treatment of cocaine addiction. Methods: Eighty-two cocaine-dependent, methadone maintained patients were randomly assigned to 1 of 3 conditions: auricular acupuncture, a needle-insertion control condition, or a no-needle relaxation control. Treatment sessions were provided 5 times weekly for 8 weeks. The primary outcome was cocaine use assessed by 3-times-weekly urine toxicology screens. Results: Longitudinal analysis of the urine data for the intent-to-treat sample showed that patients assigned to acupuncture were significantly more likely to provide cocaine negative urine samples relative to both the relaxation control (odds ratio, 3.41;95%confidence interval, 1.33-8.72; $P=.01$) and the needle-insertion control (odds ratio, 2.40;95%confidence interval, 1.00-5.75; $P=.05$). Conclusions: Findings from the current study suggest that acupuncture shows promise for the treatment of cocaine dependence. Further investigation of this treatment modality appears to be warranted

3

Verthein, U., Haasen, C., Krausz, M. (2002) Auricular Acupuncture As a Treatment of Cocaine, Heroin, and Alcohol Addiction: A Pilot Study. *Addictive Disorders & Their Treatment. 1(1):11-16, May 2002.*

Objectives: In the United States, outpatient acupuncture treatment of patients with drug and alcohol addictions has been provided for more than 20 years. Although positive effects were shown in control studies, the effectiveness of acupuncture treatment in drug addiction is not well-established and is still disputed. During the past few years, interest in acupuncture treatment has increased in Germany. It is occasionally provided in inpatient and outpatient settings for detoxification purposes. **Methods:** This longitudinal study evaluates a low-threshold outpatient acupuncture treatment project in Hamburg. During 8 months of documentation, 159 patients were included in the study- 96% of all the patients being treated. The majority participated in only a few acupuncture visits. After 2 weeks, half of the patients had already finished treatment. This study focused on 30 patients who participated in at least four follow-up assessments during the treatment. **Results:** The results show a significant decrease of withdrawal symptoms, a slight improvement of the physical and mental state, and a reduction of alcohol and cocaine consumption. **Conclusions:** Because of the great number of patients who dropped out soon after the beginning of acupuncture treatment, the sample size is rather low. Therefore, this study only shows preliminary results regarding the efficiency of acupuncture treatment of patients with drug and alcohol addictions. However, there is some evidence that acupuncture might be an effective form of therapy, especially for patients with problematic cocaine use.

4

Killeen, T.K., Haight, B., Brady, K., Herman, J., Michel, Y., Stuart, G., Young, S. (2002) The Effect of Auricular Acupuncture on Psychophysiological Measures of Cocaine Craving. *Issues in Mental Health Nursing, Jul 2002, Vol. 23 Issue 5, p445-459, 15p*

Abstract: This study used a randomized pretest/posttest control group design to test the effectiveness of auricular acupuncture interventions in diminishing psychological and physiological changes associated with cocaine craving in 30 treatment-seeking cocaine-dependent patients. The experimental group received the real auricular acupuncture intervention, insertion of needles into ear point locations specifically targeted for drug withdrawal. The control group received sham or placebo auricular acupuncture, insertion of needles into ear point locations not targeted for any specific therapeutic benefit. Psychological (Cocaine Craving Questionnaire - Now) and physiological (skin conductance activity) changes associated with cocaine craving were measured. Results showed no differences between the control and the experimental group in diminishing psychological and physiological measures associated with craving. There were differences from pre- to posttest on measures of psychological but not physiological craving for the combined experimental and control groups.

5

Margolin, A., Kleber, H., Avants, K., et al. (2002) Acupuncture for the Treatment of Cocaine Addiction: A Randomized Controlled Trial. *JAMA, 2002 - Vol 287, No. 1.*

Context: Auricular acupuncture is widely used to treat cocaine addiction in the United States and Europe. However, evidence from controlled studies regarding this treatment's effectiveness has been inconsistent. **Objective:** To investigate the effectiveness of auricular acupuncture as a treatment for cocaine addiction. **Design:** Randomized, controlled, single-blind clinical trial conducted from November 1996 to April 1999. **Setting:** Six community-based clinics in the United States: 3 hospital-affiliated clinics and 3 methadone maintenance programs. **Patients:** Six hundred

twenty cocaine-dependent adult patients (mean age, 38.8 years; 69.2% men); 412 used cocaine only and 208 used both opiates and cocaine and were receiving methadone maintenance.

Intervention: Patients were randomly assigned to receive auricular acupuncture (n=222), a needle-insertion control condition (n=203), or a relaxation control condition (n=195). Treatments were offered 5 times weekly for 8 weeks. Concurrent drug counseling was also offered to patients in all conditions. Outcome Measures: Cocaine use during treatment and at the 3- and 6-month post randomization follow-up based on urine toxicology screens; retention in treatment.

Results: Intent-to-treat analysis of urine samples showed a significant overall reduction in cocaine use (odds ratio, 1.40; 95% confidence interval, 1.11-1.74; P=.002) but no differences by treatment condition (P=.90 for acupuncture vs both control conditions). There were also no differences between the conditions in treatment retention (44%-46% for the full 8 weeks). Counseling sessions in all 3 conditions were poorly attended.

Conclusions: Within the clinical context of this study, acupuncture was not more effective than a needle insertion or relaxation control in reducing cocaine use. Our study does not support the use of acupuncture as a stand-alone treatment for cocaine addiction or in contexts in which patients receive only minimal concurrent psychosocial treatment. Research will be needed to examine acupuncture's contribution to addiction treatment when provided in an ancillary role.

6

Bier, I., Wilson, J., Studt, P., Shakleton, M. (2002) Auricular Acupuncture, Education, and Smoking Cessation: A Randomized, Sham-Controlled Trial. *Am J Public Health, Vol. 92, No. 1.*

Objectives: This study examined the effect of acupuncture alone and in combination with education on smoking cessation and cigarette consumption. Methods: We prospectively studied 141 adults in a quasi-factorial design using acupuncture, sham acupuncture, and education. Results: All groups showed significant reductions in smoking and post treatment cigarette consumption, with the combined acupuncture-education group showing the greatest effect from treatment. The trend continued in follow-up; however, significant differences were not maintained. Greater pack-year history (i.e. the number of years smoking multiplied by baseline number of cigarettes smoked per year, divided by 20 cigarettes per pack) negatively correlated with treatment effect. Trend analysis suggested 20 pack years as the cutoff point for this correlation. Conclusions: Acupuncture and education, alone and in combination, significantly reduce smoking; however, combined they show a significantly greater effect, as seen in subjects with a greater pack-year history.

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Bullock, M.L., Kiresuk, T., Sherman, R., Lenz, S., Culliton, P., Boucher, T., Nolan, C. (2002). A large randomized placebo controlled study of auricular acupuncture for alcohol dependence. *Journal of Substance Abuse Treatment* 22 (2002) 71– 77

We report clinical data on the efficacy of acupuncture for alcohol dependence. 503 patients whose primary substance of abuse was alcohol participated in this randomized, single blind, placebo controlled trial. Patients were assigned to either specific acupuncture, nonspecific acupuncture, symptom based acupuncture or convention treatment alone. Alcohol use was assessed, along with depression, anxiety, functional status, and preference for therapy. This article will focus on results pertaining to alcohol use. Significant improvement was shown on nearly all measures. There were few differences associated with treatment assignment and there were no treatment differences on

alcohol use measures, although 49% of subjects reported acupuncture reduced their desire for alcohol. The placebo and preference for treatment measures did not materially effect the results. Generally, acupuncture was not found to make a significant contribution over and above that achieved by conventional treatment alone in reduction of alcohol use.

8

Trumpler, F., Oez, S., Stahli, P., Brenner, H.D., Juni, P. (2003) Acupuncture for alcohol withdrawal: a randomized controlled trial. *Alcohol & Alcoholism*. 2003 Jul-Aug; 38(4):369-75.

Abstract — Background and Aims: Previous trials on acupuncture in alcohol addiction were in outpatients and focused on relapse prevention. Rates of dropout were high and interpretation of results difficult. We compared auricular laser and needle acupuncture with sham laser stimulation in reducing the duration of alcohol withdrawal. **Methods:** Inpatients undergoing alcohol withdrawal were randomly allocated to laser acupuncture (n = 17), needle acupuncture (n = 15) or sham laser stimulation (n = 16). Attempts were made to blind patients, therapists and outcome assessors, but this was not feasible for needle acupuncture. The duration of withdrawal symptoms (as assessed using a nurse-rated scale) was the primary outcome; the duration of sedative prescription was the secondary outcome. **Results:** Patients randomized to laser and sham laser had identical withdrawal symptom durations (median 4 days). Patients randomized to needle stimulation had a shorter duration of withdrawal symptoms (median 3 days; P = 0.019 versus sham intervention), and tended to have a shorter duration of sedative use, but these differences diminished after adjustment for baseline differences. **Conclusions:** The data from this pilot trial do not suggest a relevant benefit of auricular laser acupuncture for alcohol withdrawal. A larger trial including adequate sham interventions is needed, however, to reliably determine the effectiveness of any type of auricular acupuncture in this condition.

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Berman, A.H., Lundberg, U., Krook, A.L., Gyllenhammar, C. (2004) Treating drug using prison inmates with auricular acupuncture: A randomized controlled trial. *J Substance Abuse Treatment*, March 2004, Vol 26, 95-102.

This study tested the viability of auricular acupuncture in prisons for alleviating inmates' symptoms of psychological and physical discomfort and reducing their drug use. The experimental NADA-Acudetox protocol was compared with a non-specific helix control protocol in a randomized trial. Over a period of 18 months, a 4-week, 14-session auricular acupuncture treatment program was offered in two prisons to 163 men and women with self-reported drug use. Among treatment completers, no differences by method were found in self-reported symptoms of discomfort. Drug use occurred in the NADA group but not in the helix group. In contrast, confidence in the NADA treatment increased over time while it decreased for the helix treatment. No significant negative side effects were observed for either method. Participants in both groups reported reduced symptoms of discomfort and improved nighttime sleep. Future research should compare auricular acupuncture to a non-invasive control in order to attempt to disentangle active effects from placebo.

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Santasiero, R., Neussle, G. (2005) Cost-Effectiveness of Auricular Acupuncture for Treating Substance Abuse In An HMO Setting: A Pilot Study. *Medical Acupuncture*, May 2005, Vol 16, No.3.

Background: Auricular acupuncture has been used as adjunctive therapy for the treatment of chemical dependency for more than 25 years. Use of adjunctive auricular acupuncture has been shown to relieve withdrawal symptoms and improve retention of patients in a voluntary outpatient detoxification treatment program. Little information is available about its use and cost-effectiveness in a managed care setting. Objective: To determine if auricular acupuncture used in an outpatient health maintenance organization (HMO) chemical dependency program could be a cost-saving modality. Design, Patients, and Setting Forty-four patients were in the study: 22 in the intervention group and 22 in the control group. The setting was an outpatient HMO clinic chemical dependency program. Interventions: Both groups received a treatment protocol including individual sessions, group therapy which included educational sessions, supportive therapy, and Alcoholics Anonymous 12-step therapy. The intervention group was treated at 5 auricular points, including Shen Men, Sympathetic, Kidney, Liver, and Lung. Both ears were treated. The average number of acupuncture sessions was 22 in the study group; sessions occurred 5 days a week. Main Outcome Measures: Percentage of patients completing the chemical dependency program, rates of hospitalization, drug-free urine screens, and possible cost savings.

Results: At 6 months of follow-up, the acupuncture-treated group had higher program completion rates (74% vs 44%), higher rates of negative urine screens (96% vs 85%), fewer inpatient rehabilitation days (39 vs 57 days), fewer inpatient psychiatric days (0 vs 3 days), and fewer outpatient detoxification episodes (0 vs 2) compared with the control group. The costs incurred in this study were \$15,580.00 for acupuncture and \$17,890.00 for control. Conclusions: Auricular acupuncture when used as adjunctive therapy in an outpatient HMO chemical dependency treatment program is associated with better patient outcomes and can result in cost savings.

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Christine, M., Courbasson, C., Araujo de Sorkin, A., DuUerud, B., Van Wyk, L.(2007) Acupuncture Treatment for Women with Concurrent Substance Use and Anxiety / Depression: An Effective Alternative Therapy? *Family Community Health*, 2007, Vol 30. No. 2).

This exploratory study evaluated the benefits of adding auricular acupuncture to a 21-day outpatient structured psycho educational treatment program for women with concurrent substance use problems, anxiety, and depression. Women receiving acupuncture ($n = 185$) reported having reduced physiological cravings for substances, felt significantly less depressed, less anxious and were better able to reflect on and resolve difficulties than women in the control group ($n = 101$). It was found that auricular acupuncture, as an adjunct therapy to a comprehensive psycho educational treatment program for women with addictions, shows promise in being an effective, more viable treatment alternative to anxiolytics.

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Kunz, S., Schulz, M., Lewitzky, M., Driessen, M., Rau, H. (2007) Ear Acupuncture for Alcohol Withdrawal in Comparison With Aromatherapy: A Randomized-Controlled Trial. *Alcohol Clin Exp Res*, Vol 31, No 3, 2007: pp 436–442

Background: There is increasing clinical acceptance of acupuncture as a treatment of substance related disorders. Little is known about acupuncture as a treatment for the withdrawal syndrome in inpatient settings. We compared auricular needle acupuncture with aromatherapy in reducing the

duration and severity of symptoms of alcohol withdrawal. Methods: In patients undergoing alcohol withdrawal were randomly allocated to needle acupuncture (n555) and aromatherapy (n554). Both therapies were applied daily during the first 5 consecutive treatment days. The rating scale for the assessment of the alcohol-withdrawal syndrome (AWS scale) served as the main dependent variable and was applied daily during the first 5 days of the withdrawal. Further measures included a subjective visual analog scale of craving and the Self Assessment Manikin (SAM). Results: Thirty-six of the 55 patients who received acupuncture, and 38 of the 54 patients who received aromatherapy, finished the study regularly. The groups differed in their initial self-reported arousal, which then served as a covariate in the further analyses. Neither the extent of craving nor of withdrawal symptoms differed between groups over the observation period. Self-rated arousal decreased in response to both treatments from days 1 to 2 (po0.001) and within single days (po0.001), and we found a significant interaction between pretreatment versus posttreatment and days (po0.001). Interactions including between-subjects effects and intervention did not achieve the significance level. Conclusion: The results do not support the assumption of a superiority of acupuncture over the control therapy in its specific effects on alcohol withdrawal symptoms.

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Wu, T. P., Chen, F.P., Liu, J.Y., Lin, M.H., Hwang, S.J. (2007) A randomized controlled clinical trial of auricular acupuncture in smoking cessation. *J Chin Med Assoc.* 2007 Aug; 70(8):331-338.

Background: Tobacco smoking is responsible for human diseases of the lung, heart, circulatory system and various kinds of cancers, and is a serious public health problem worldwide.

Acupuncture has been promoted as a treatment modality for smoking cessation. However, its efficacy still remains controversial. Methods: We conducted a prospective, randomized, controlled trial using auricular acupuncture for smoking cessation in 131 adults who wanted to stop smoking. Thirteen subjects withdrew from the study and 118 subjects were included in the final analyses (mean age, 53.7 ± 16.8 years; 100 males, 18 females). The treatment group ($n = 59$) received auricular acupuncture in *Shen Men*, *Sympathetic*, *Mouth* and *Lung* points for 8 weeks. The control group ($n = 59$) received sham acupuncture in non-smoking-cessation-related auricular acupoints (*Knee*, *Elbow*, *Shoulder* and *Eye* points). The enrolled subjects were then followed monthly for 6 months after stopping the acupuncture treatment. Results: Between both groups before acupuncture treatment, there was no significant difference with regard to gender, mean age, education level, and mean values for the age at which smoking started, smoking duration, daily number of cigarettes smoked and nicotine dependent score. At the end of treatment, cigarette consumption had significantly decreased in both groups, but only the treatment group showed a significant decrease in the nicotine withdrawal symptom score.

Smoking cessation rate showed no significant difference between the treatment group (27.1%) and the control group (20.3%) at the end of treatment. There was also no significant difference in the smoking cessation rate between the treatment group (16.6%) and the control group (12.1%) at the end of follow-up. There were no major side effects of auricular acupuncture in both groups. Conclusion: Our results showed that auricular acupuncture did not have a better efficacy in smoking cessation compared to sham acupuncture. Combined acupuncture with behavior counseling or with nicotine replacement therapy should be used in further smoking cessation trials to enhance the success rate of smoking cessation.