### Sleep, insomnia and the effectiveness of acupressure

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Efficacy of wrists overnight compression (HT 7 point) on insomniacs: possible role of melatonin?

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AIM: Insomnia is a major problem which decreases life quality. Many causes are involved with it and anxiety is often associated. The underlying mechanism is not completely understood, even though different factors seem to be associated. Among them melatonin and its circadian rhythm is thought to have an important role. In addition, acupressure and acupuncture are known to ameliorate insomnia and anxiety, when a specific wrist point is stimulated (HT 7 Shenmen). With these bases, the aim of the present study has been to evaluate the efficacy of an acupressure device, "H7-insomnia control", positioned on HT 7 points, during the night, in terms of general health and anxiety levels, together with the evaluation of sleep quality and the urinary melatonin metabolite 6-hydroxymelatonin sulphate determination, in a number of insomniacs. METHODS: Forty patients with insomnia were divided into two groups and randomly received either the H7 or placebo treatments, in a double-blind protocol, for 20 nights. Before and after treatments every subject answered a series of questionnaires (General Health Questionnaire 28 items; State-Trait Anxiety Inventory; Pittsburgh Sleep Quality Index) and collected 24 h urines, divided into two samples of 12 h each. Urinary melatonin metabolite was then determined using a RIA method, RESULTS: Data obtained indicate that the device H7-insomnia control is efficacious to ameliorate quality of sleep and reduce anxiety levels in insomniacs, at a higher extent than in the placebo group. In addition, the 24 hours urinary melatonin metabolite rhythm, obtained at the end of treatment, was considered as being normal in a higher percentage of H7-treated patients, with respect to the placebo group. CONCLUSION: It is plausible to hypothesize that the wrist acupressure device might be considered a valid tool, without adverse effects since it does not contain pharmaceutical products, that is able to naturally ameliorate sleep quality in insomniacs, acting through a not jet completely clarified mechanism, that may involve melatonin.

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Efficacy of HT 7 point acupressure stimulation in the treatment of insomnia in cancer patients and in patients suffering from disorders other than cancer.

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AIM: The induction of sleep would depend on interaction between gabaergic system and the pineal gland through its main hormone melatonin. Until few years ago benzodiazepines were the only drugs effective in the treatment of insomnia. Recently, however, both melatonin and acupressure have appear to be active in sleep disorders. The aim of study was to evaluate the efficacy of HT 7 point acupressure in insomnia. METHODS: The study enrolled 25 patients affected by sleep disorders, 14 of whom had a neoplastic disease. They were treated by HT 7 stimulation for al least two consecutive weeks using a medical device named H7 Insomnia Control. RESULTS: An improvement in the quality of sleep was achieved in 15/25 (60%) patients, with a more evident efficacy in cancer patients (11/14 [79%]). CONCLUSION: This study confirms previous clinical data showing the efficacy of acupressure in the treatment of sleep disorders, particularly in cancer-related insomnia.

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# Acupoints massage in improving the quality of sleep and quality of life in patients with end-stage renal disease.

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BACKGROUND: Traditional Chinese acupressure is a noninvasive technique that employs pressure and massage to acupoints in order to stimulate the balance of life energy that promotes health and comfort. Sleep disturbance is common in patients with end-stage renal disease but no intervention studies have addressed this problem. Aim. The purpose of the present study was to test the effectiveness of acupoints massage for patients with end-stage renal disease and experiencing sleep disturbances and diminished quality of life. METHODS: The study was a randomized control trial. A total of 98 end-stage renal disease patients with sleep disturbances were randomly assigned into an acupressure group, a sham acupressure group, and a control group. Acupressure and sham acupressure group patients received acupoints or no acupoints massage three times a week during haemodialysis treatment for a total of 4 weeks. The measures included the Pittsburgh Sleep Quality Index, Sleep Log, and the Medical Outcome Study - Short Form 36. FINDINGS: The results indicated significant differences between the acupressure group and the control group in Pittsburgh Sleep Quality Index subscale scores of subjective sleep quality, sleep duration, habitual sleep efficiency, sleep sufficiency, and global Pittsburgh Sleep Quality Index scores. Sleep log data revealed that the acupressure group significantly decreased wake time and experienced an improved quality of sleep at night over the control group. Medical Outcome Study - Short Form 36 data also documented that acupressure group patients experienced significantly improved quality of life. CONCLUSION: This study supports the effectiveness of acupoints massage in improving the quality of sleep and life quality of endstage renal disease patients, and offers a noninvasive therapy for sleep-disturbed patients.

## The effectiveness of acupressure in improving the quality of sleep of institutionalized residents.

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BACKGROUND: Elderly people often suffer from disturbed sleep. Because traditional Chinese medicine indicates that acupressure therapy may induce sedation, testing the effectiveness of acupressure in enhancing the quality of sleep of institutionalized residents with a well-designed scientific study is needed. METHODS: A randomized block experimental design was used. The Pittsburgh Sleep Quality Index (PSQI) questionnaire was used as a screening tool to select subjects with sleep disturbance. By matching the effects of hypertension, hypnosis, naps, and exercise, subjects were randomly assigned to an acupressure group, a sham acupressure group, and a control group. Each group had 28 subjects for a total of 84 subjects. The same massage routine was used in the acupressure group and the sham acupressure group, whereas only conversation was employed in the control group. RESULTS: There were significant differences in PSQI subscale scores of the quality, latency, duration, efficiency, disturbances of sleep, and global PSQI scores among subjects in the three groups before and after interventions. Furthermore, there was a significant reduction in the frequencies of nocturnal awakening and night wakeful time in the acupressure group compared to the other two groups. CONCLUSIONS: This study confirmed the effectiveness of acupressure in improving the quality of sleep of elderly people and offered a nonpharmacological therapy method for sleepdisturbed elderly people.