Effects of Acupressure on Fatigue of Lung Cancer Patients undergoing Chemotherapy

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Abstract

BACKGROUND: The aim of this study was to explore the effects of acupressure on fatigue of lung cancer patients undergoing chemotherapy. METHODS: For this prospective, longitudinal, double-blinded experimental study, we recruited 57 subjects who met the selection criteria from one medical center in northern Taiwan. Subjects were randomly assigned to three groups: experimental A (n=17), experimental B (n=24), and control C (n=16). Subjects in group A received acupressure with essential oils, those in group B received acupressure only, and those in group C received sham acupressure. The true acupoints chosen for this study were Hegu (LI4), Zusanli (ST36), and Sanyingjiao (SP6), and the sham acupoints were the metacarpal bone, the patella, and inner ankle. All subjects started the intervention from the first day of initial chemotherapy. Subjects received true or sham acupressure once every morning for 5 months on both sides of the body, with each acupoint pressed in rotation for 1 minute. The first acupressure was implemented by the researcher, who taught subjects how to correctly find acupoints and to do acupressure. All subjects repeated the operations until they could correctly perform acupressure. After the initial chemotherapy, subjects performed acupressure at home by themselves. Subjects' fatigue was measured before initial chemotherapy (T0), during the 3rd cycle of chemotherapy (T1), and during the 6th cycle of chemotherapy (T2). We also measured

participants' performance status, anxiety and depression, sleep quality, and laboratory values. Differences between groups in outcomes were measured at T0, T1, and T2 by general estimating equations. **RESULTS:** After controlling for age and compliance with intervention as the confounding variable, subjects who received acupressure with essential oil and acupressure only had significantly lower fatigue and better physical performance status than subjects who received sham acupressure. **CONCLUSIONS:** Acupressure at the LI4, ST36, and SP6 acupoints with or without essential oil was a value-added intervention for lung cancer patients undergoing chemotherapy to reduce cancer-related fatigue.

KEYWORDS: fatigue, acupressure, experimental study, lung cancer