

Research Article (Dette er en oppsummering, hele artikkelen er referert over).

(Reishi *Ganoderma lucidum*)
**Spore Powder of *Ganoderma lucidum* Improves
Cancer-Related Fatigue in Breast Cancer Patients
Undergoing Endocrine Therapy: A Pilot Clinical Trial**

Hong Zhao, Qingyuan Zhang, Ling Zhao, Xu Huang, Jincui Wang, and Xinmei Kang

Department of Internal Medicine, The Third Affiliated Hospital of Harbin Medical University, Harbin 150086, Heilongjiang Province, China

Received 24 May 2011; Accepted 1 September 2011

Academic Editor: Jos e Luis R os

Copyright   2012 Hong Zhao et al.

This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

The fatigue prevalence in breast cancer survivors is high during the endocrine treatment. However, there are few evidence-based interventions to manage this symptom. The aim of this study was to investigate the effectiveness of spore powder of *Ganoderma lucidum* for cancer-related fatigue in breast cancer patients undergoing endocrine therapy. Spore powder of *Ganoderma lucidum* is a kind of Basidiomycete which is a widely used traditional medicine in China. 48 breast cancer patients with cancer-related fatigue undergoing endocrine therapy were randomized into the experimental or control group. FACT-F, HADS, and EORTC QLQ-C30 questionnaires data were collected at baseline and 4 weeks after treatment. The concentrations of TNF- α , IL-6, and liver-kidney functions were measured before and after intervention. The experimental group showed statistically significant improvements in the domains of physical well-being and fatigue subscale after intervention. These patients also reported less anxiety and depression and better quality of life. Immune markers of CRF were significantly lower and no serious adverse effects occurred during the study. This pilot study suggests that spore powder of *Ganoderma lucidum* may have beneficial effects on cancer-related fatigue and quality of life in breast cancer patients undergoing endocrine therapy without any significant adverse effect.