Original Article

Factors Correlated with Fatigue in Terminally Ill Cancer Patients: A Longitudinal Study

Toru Okuyama, MD, PhD, Tatsuo Akechi, MD, PhD, Yasuo Shima, MD, Yuriko Sugahara, MD, Hitoshi Okamura, MD, PhD, Takashi Hosaka, MD, PhD, Toshiaki A. Furukawa, MD, PhD, and Yosuke Uchitomi, MD, PhD Psycho-Oncology Division (T.O., T.A., Y.Su., H.O., Y.U.), Research Center for Innovative Oncology; Psychiatry Division (T.A., Y.U.); Palliative Care Unit (Y.Sh.), National Cancer Center Hospital East, Kashiwa City, Chiba; Course of Specialized Clinical Care, Psychiatry (T.O., Y.Su., T.H.), Tokai University School of Medicine, Isehara City, Kanagawa; Department of Psychiatry and Cognitive-Behavioral Medicine (T.O., T.A., T.A.F.), Nagoya City University Graduate School of Medical Sciences, Nagoya City Aichi; and Psychiatry Division (H.O.), National Cancer Center Hospital, Tokyo, Japan

Abstract

Fatigue is among the most distressing symptoms experienced by terminally ill cancer patients. It is necessary to clarify factors correlated with fatigue to develop effective management strategies. A consecutive sample of cancer patients newly registered in the Palliative Care Unit (PCU) was assessed on three occasions: at the second visit to the outpatient clinic of the PCU (Time 1), three weeks after the Time 1 session over the telephone (Time 2), and at admission to the PCU (Time 3). The patients' fatigue and a broad range of biopsychosocial factors were assessed using the validated questionnaires, structured interviews, and medical record reviews at Time 1 and Time 3. Fatigue was the only factor assessed at Time 2. Two hundred patients participated in the Time 1 session, and 129 and 73 were followed at Time 2 and Time 3, respectively. Greater fatigue at Time 1 was significantly correlated with psychological distress, lower Karnofsky Performance Status score, dyspnea, and appetite loss (adjusted coefficients of determination $[R^2] = 0.49$). Greater fatigue at Time 2 was significantly correlated with psychological distress, lower Karnofsky Performance Status and fatigue at Time 1 (adjusted $R^2 = 0.51$). Greater fatigue at Time 3 was significantly correlated with changes for the worse in psychological distress, Karnofsky Performance Status, and dyspnea severity during the period between Time 1 and Time 3, after adjusting for Time 1 fatigue (adjusted $R^2 = 0.54$). The results indicate that fatigue in terminally ill cancer patients is determined by both physical and psychological factors. It may be important to include psychological intervention in the multidimensional management of fatigue in this population, in addition to physical and nursing interventions. J Pain Symptom Manage 2008;35:515-523. © 2008 U.S. Cancer Pain Relief Committee. Published by Elsevier Inc. All rights reserved.

This work was supported in part by Grants-in-Aid for Cancer Research (9-31, 9-32) and the Second Term Comprehensive 10-Year Strategy for Cancer Control from the Ministry of Health, Labor and Welfare, Japan. Toru Okuyama is an awardee of a Research Resident Fellowship from the Foundation for the Promotion of Cancer Research, Japan. The authors have no financial or personal relationships with other people or organizations that could inappropriately bias this work.

Address correspondence to: Yosuke Uchitomi, MD, PhD, Psycho-Oncology Division, Research Center for Innovative Oncology, National Cancer Center Hospital East, 6-5-1, Kashiwanoha, Kashiwa, Chiba 277-8577, Japan. E-mail: yuchitom@east.ncc.go.jp

Accepted for publication: June 19, 2007.

Key Words

Fatigue, depression, terminal, palliative care, quality of life, symptom management, psychooncology, psychiatry, end of life

Introduction

Fatigue is a critical problem among terminally ill cancer patients. Previous studies have shown the prevalence of fatigue in this population to be between 52% and 81%. 1-3 Symptom management to improve the quality of life of patients with incurable cancer is the primary task of medicine. However, there are no established strategies for the management of fatigue. The general strategy for symptom management is to correct the cause of the symptom. Therefore, the factors that are correlated with fatigue in cancer patients must be clarified before management strategies can be developed. 5

Fatigue is thought to be associated with various factors. Physical factors include anticancer treatment; other symptoms such as pain and dyspnea; and anemia. Among the psychological factors contributing to fatigue, the role of depressive mood has been most discussed. Our previous study and some other studies in cancer patients have confirmed this association, Although the relative contribution of each factor is thought to vary over the course of the illness, few studies have applied a longitudinal design, or have been conducted in terminally ill cancer patients.

Only one previous study has investigated the factors associated with fatigue in terminally ill cancer patients.³ A convenience sample of 95 cancer patients who were inpatients at a palliative care unit were compared with 98 healthy individuals. The results of a cross-sectional analysis revealed that pain and dyspnea were the only factors that were significantly correlated with fatigue in the patient group, whereas depression and anxiety were found to be significant in the control group. The study could not clarify any longitudinal associations between fatigue and these factors.

Taking this information into consideration, we assessed a broad range of psychosocial factors in a longitudinal study to clarify the factors correlated with fatigue in terminally ill cancer patients.

Patients and Methods

Consecutive outpatients with cancer, who had been seen at the Palliative Care Unit (PCU) of the National Cancer Center Hospital East, Japan, were asked to participate in the study. The eligibility criteria were (a) newly registered in the PCU, (b) not currently undergoing curative anticancer treatment, (c) informed of their cancer diagnosis, (d) well enough to complete the questionnaires and participate in at least a half-hour interview, and (e) not suffering from cognitive disorders, defined as a score of 24 or less on the Mini Mental State examination. 14 The Mini Mental State examination is a brief screening battery for detecting cognitive disturbances, and the Japanese version of the Mini Mental State examination has been validated.¹⁵

This study was approved by the Institutional Review Board and the Ethics Committee of the National Cancer Center, Japan. Written consent was obtained from each of the patients after they had been fully informed of the purpose and intent of the study.

Three sessions were held: at the time of the patient's second visit to the outpatient clinic of the PCU (Time 1); three weeks later over the telephone (Time 2); and at the time just after being hospitalized to the PCU (Time 3).

Measurements Performed at the Time 1 and Time 3 Sessions

Fatigue. Fatigue was assessed using the Cancer Fatigue Scale (CFS), a 15-item self-rating scale for assessing fatigue in cancer patients. The scale consists of three subscales (physical, affective, and cognitive) that address the multi-dimensional nature of fatigue. Each item has a five-point Likert scale (from 1 [not at all] to 5 [very much]), and the total fatigue score can range from 0 to 60, with higher scores

Download English Version:

https://daneshyari.com/en/article/2724727

Download Persian Version:

https://daneshyari.com/article/2724727

<u>Daneshyari.com</u>