Original Article

Mood State and Quality of Sleep in Cancer Pain Patients: A Comparison to Chronic Daily Headache

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Abstract

Cancer pain is commonly believed to be a unique type of pain and dissimilar to noncancer pain; however, only limited research efforts have been directed at examining this belief. The aim of this study was to explore whether patients with chronic daily headache (CDH) and patients with chronic cancer pain (CCP) present with different pain, mood, and sleep quality profiles. Forty-seven patients diagnosed with CDH were matched by age and gender with 47 patients with CCP. The research instruments included the Brief Pain Inventory-Chinese version, the Profile of Mood States Short Form, and the Pittsburgh Sleep Quality Index-Taiwan Form (PSQI-T). Results revealed that there was no difference in pain intensity between the patients with CDH and those with CCP; however, the CCP group reported significantly higher mean levels of pain interference with daily life than did the CDH group. These two groups did not differ on the Total Mood Disturbance score; however, the CCP group reported significantly lower mean levels of vigor than did the CDH group. Moreover, there was no difference on the PSQI-T total score between these two groups; however, the CDH group reported higher mean scores of sleep disturbance, higher mean scores of use of sleep medications, lower mean scores of sleep efficiency, and lower mean scores of daytime dysfunction than did the CCP group. Despite some differences between these two groups, pain, mood, and sleep quality profiles in these two types of pain groups are similar. J Pain Symptom Manage 2007;33:32–39. © *2007 U.S. Cancer Pain Relief Committee. Published by Elsevier Inc. All rights reserved.*

Key Words

Noncancer pain, chronic daily headache, cancer pain, sleep, mood disturbance

Introduction

Pain associated with cancer is commonly believed to be unique and dissimilar to noncancer pain. Cancer pain has typically been regarded as exclusively a biomedical problem requiring physical interventions.[1] The dichotomy between cancer pain and

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noncancer pain implies that these two categories of pain differ in etiology, create different responses in patients, and require different management strategies.[2] Research efforts directed at examining this common belief are limited. The aim of this study was to explore the difference between cancer pain and noncancer pain in terms of patient pain, mood, and sleep disturbance profiles using chronic daily headache (CDH) as an example of noncancer pain.

Consistent with the fact that cancer is the leading cause of death in Taiwan, the government has directed attention to chronic cancer pain (CCP) rather than to other types of pain, such as CDH. The government of Taiwan[3] has published a national guideline on management of cancer pain, and the World Health Organization (WHO) has likewise given attention to cancer pain by releasing the WHO guidelines for cancer pain relief.[4] Little attention has been directed toward the study of noncancer pain.

Cancer pain and noncancer pain are assumed to be dissimilar because the disease outcomes differ so greatly. However, similarities do exist. CCP, like CDH, occurs daily or near daily for a prolonged period of time[5,6] and thus has a great impact on patient quality of life.[7] In addition, mood and sleep disturbance are common distressing symptoms for patients with CCP as well as those with CDH.[8–17] For example, studies have found that CCP has a great impact on patients' mood state and emotional distress[7–10] and on quality of sleep and sleep disturbance.[12,13] Similarly, researchers have reported that CDH usually is accompanied by mood disturbances[14,15] and sleep disturbances.[16,17]

Some important studies[18,19] have explored the assumption that cancer pain is unique and dissimilar to noncancer pain. Lin[18] found that cancer pain patients and low back pain patients shared very similar pain experiences and used similar pain coping strategies. In another study, Turk et al.[19] found that reported pain intensity levels of cancer patients were comparable to those of patients with noncancer pain, and that the response patterns of both groups were highly comparable. Therefore, findings from these few studies do not support the common belief that cancer pain is unique and dissimilar to noncancer pain in its severity or in patients' responses. More research is needed to explore the differences between cancer pain and noncancer pain.

Materials and Methods

Participants and Settings

This study was conducted at headache clinics and outpatient oncology clinics of two medical centers in Taiwan. A consecutive sample was recruited for this study consisting of outpatients with CDH or CCP. To be included in the CDH group, patients had to a) be over the age of 18, b) have a headache frequency >15 days/month and duration >4 h/day if untreated,[20] c) have been experiencing headache for more than a month, with the worst pain intensity being greater than 3 (on a 0–10 scale) in the past week, d) be able to communicate in Chinese or Taiwanese, e) not currently be diagnosed with cancer, and f) be currently receiving no treatment with steroids. To be included in the CCP group, patients had to a) be over the age of 18, b) have been diagnosed to have advanced cancer (Stage III or Stage IV), c) have been experiencing cancer pain for more than a month, with the worst pain intensity being greater than 3 in the past week, d) be able to communicate in Mandarin or Taiwanese, e) have received no radiotherapy, chemotherapy, or surgery in the past month, f) have experienced no headache in the past week, and g) be currently receiving no treatment with steroids.

A pilot study with 20 CCP patients and 20 CDH patients was carried out to examine the feasibility of this formal study. In the pilot study, significant differences in age and gender were found between the CDH group and the CCP group. No other demographic variables were found to be different between these two groups. For the study, 47 CDH patients were matched by age and gender with 47 CCP patients.

Instruments

Brief Pain Inventory-Chinese Version (BPI-C). The BPI-C[21] was used in this study to assess the multidimensional nature of pain, including intensity and subsequent interference with life activities in the preceding 24 hours. In order to be consistent with other measures