乳癌病患化學治療期間的疲憊程度與睡眠品質之縱貫性研究

Change of Fatigue and Quality of Sleep During Chemotherapy in Patients with Breast Cancer : A Longitudinal Study

中文摘要

本研究以結構性問卷爲工具，經實際訪談、電話訪談、病患自我報告，對首次接受化療乳的乳癌病患進行縱貫性研究調查。研究目的，在藉由長期追蹤乳癌病患於輔助化學藥物治療前到化療中程至化療末期過程的疲憊程度與睡眠品質變化及其相關性與影響因子，期望研究結果將有助於日後醫護人員在照護此類病患時之依據，與合適性護理。共收 40 位乳癌病患，研究工具包括:個人基本人資料表、台灣版簡明疲憊量表、台灣版安德森症狀量表、Epworth 嗜睡量表、睡眠日誌、計步器。資料以描述性統計、推論性統計及廣義性估計方程式來進行分析。結果: 1 疲憊發生率、嚴重度及干擾程度於開始化療後顯著增加。化療前一週有異常疲憊者是 32%，治療後爬升至 92-100%。第一次與第三次化療後疲憊高峰是在化療後 2 天，但第六次化療後第一天達高峰；化療期間的疲憊軌跡未隨後續治療增加；於高峰期後之後逐間下降直到下一個療程之後。整體而言平均疲憊嚴重度化療前是輕度，化療後一週內是中度。2.整體睡眠品質不良百分比化療前是 38%，化療後 58-75%。於化療期間睡眠效率降低睡眠潛伏期延長，總臥床時間增加，主觀睡眠品質良好程度降低。整體睡眠品質不良百分比化療前是 50%，化療後 58-75%。第一次化療後一週睡眠品質相較於其他療程比較差。3. 影響平均疲憊程度相關因子；不同疾病期別平均疲憊程度不一致。日間嗜睡程度高、症狀困擾程度高，低血紅素、主觀睡眠品質差伴隨較高疲憊程度。以上相關因素逐步回歸分析後，可解釋平均疲憊程度總變異量 64%。4.化療期間影響主觀睡眠品質相關因子；睡眠效率好、實際睡眠時間長、平均夜醒來次數少、日間小睡時間少、平均疲憊程度低，較好的主觀睡眠品質。以上 5 個變項可解釋平均睡眠品質良好程度總變異量 49.2%。

英文摘要

The study carries out a longitudinal analysis on breast cancer patients undergoing the first ,third and six cycle of adjuvant chemotherapy. Structured questionnaires, in-person interviews, telephone interviews, and patietns' self-reports were used for assessment in this study. The aim of the study is to evaluate the relationship between the degree of fatigue, quality of sleep, and the associated affecting factors during the period from the very beginning of chemotherapy to the end of chemotherapy,so that in the future, higher quality and more appropriate care could be provided to these patients by our staff.

A total of 40 breast cancer patients were enrolled in this study, who have been evaluated with: personal data sheets, Brief Fatique Inventory- Taiwan Form,Anderson

Symptom Inventory -Taiwan Form,Epworth Sleepness Scale, Sleep log. The data were analyzed by descriptive and deductive statistics, and generalized estimating equations. The results of our study reveal the following findings: (1) The incidence and severity of tiredness, and the degree of life function disturbance by fatigue start to increase dramatically after the initiation of chemotherapy. One week before the chemotherapy starts, only 32% of patients experienced unusual fatigue. The rate rose up to 92-100% after the completion of chemotherapy. The the peak level of fatique occurs on the second day of chemotherapy during the first and third cycle of chemotherapy. During the sixth cycle, the peak fatigue occurs on the first day, and then declines gradually afterwards. The fatigue level only rises again until the next cycle of chemotherapy. Overall, the average level of fatigue is mild before chemotherapy, moderate within the first week after the chemotherapy. (2) The overall incidence of poor sleep quality is 38% before chemotherapy, and 58-75% after the chemotherapy. During the chemotherapy cycle, the efficiency of sleep decreases, the latency of sleep increases, total time in bed-rest increases, and subjective sleep quality decreases. The quality of sleep is especially worse within one week after the first cycle of chemotherapy. (3) Factors affecting the degree of fatigue: different stages of disease lead to different levels of fatigue. Daytime somnolence, irritating symptoms, low hemoglobin levels, and subjective low sleep quality all contribute to higher degree of fatigue. After regression analysis of the aforementioned factors, total variance of the fatigue level could be explained. (4) Associated factors affecting the subjective quality of sleep include: good sleep efficiency, long actual sleep time, fewer awakenings during the night, less time spent for naps during the day, lower level of fatigue, and better subjective sleep quality. The above described variables could explain the total variance of sleep quality at 49%.