以 Actigraphy 評估偏頭痛患者睡眠品質與頭痛之相關性
Sleep and Migraine: An Actigraphic Study

中文摘要

睡眠和頭痛之間的關係已被發現有超過一百年的時間，不管是睡眠不足或睡太多，都會引起頭痛的發生，但是也有很多的頭痛可藉由睡眠緩解。相反的，頭痛的發生也會干擾睡眠，頭痛的治療也會造成失眠或嗜睡的情形，兩者複雜且互為因果的關係尚未完全釐清，主要是因為過去的研究資料多為主觀的自我報告，較少使用客觀儀器測量及確立睡眠品質。因此本研究之目的在於分析偏頭痛患者主客觀睡眠品質的差異，並探討睡眠品質與偏頭痛發生之相關性及其預測因素。本研究採縱貫性研究設計，以方便取樣於北部一所醫學中心神經內科門診，收集 52 位偏頭痛患者一週的睡眠及頭痛資料，使用的研究工具包括腕動計（actigraphy）、睡眠日誌（sleep log）、頭痛日誌（headache diaries）、醫院焦慮憂鬱量表（HADS）及柏林問卷（Berlin Questionnarie），以描述性統計、paired t-test 及廣義估計方程式進行資料分析。研究結果發現：（1）比較腕動計與睡眠日誌之睡眠參數，除了睡眠潛伏期之外，其餘睡眠參數有顯著差異。（2）前一晚有無頭痛發生和頭痛程度為主觀睡眠品質的重要預測因子。（3）入睡後醒來時間大於 5 分鐘的次數為次日有無頭痛發生的重要預測因子。（4）前一晚入睡後醒來時間>5 分鐘的次數為偏頭痛發生的重要預測因子。綜合以上研究結果，頭痛和睡眠之間確實存在一重要的關係。

英文摘要

The relationship between sleep and headaches has been known for more than a century. Headache could be triggered by insufficient sleep or by oversleeping and that many headaches could be relieved by good quality of sleep. On the other sides, headache attack may disturb the quality of sleep. Besides, treatments for headache may lead to insomnia or sleepiness. Little is known about causal relationship between headache and sleep because there have been few objective assessments of sleep quality. Therefore, the aim of this article attempts to explore how the sleep quality of migraine patients and migraine attack prognostic factor are related. This research involved a longitudinal design and comprised of actigraphy, sleep log, headache diaries, HADS, Berlin Questionnaire concerning sleep quality and headache record of migraine patients in one week. 52 migraine patients in a northern Taiwan medical center neurology outpatient department participated in the study. The analysis of the study was conducted through descriptive statistics, paired t-test, and generalized estimating equations.

Results of this study show in the following comment: (1) Except sleep latency, there was a statistically significant difference between the sleep log and actigraphic sleep parameters. (2) Severity and attack of headache in the day time is prediction of the subjective sleep quality in the night. (3)After going to sleep, the waking time is bigger than 5 minutes number of times an important predictive factor of next day

headache or not. (4) The preceding night of waking time is bigger than 5 minutes number of times related to migraine attack. In conclusions, the results of this study reveal an important relationship existed.