術後枕部高度對脊膜穿刺麻醉後頭痛之影響

The Effect of Occipital Altitude on Postudural Puncture Headache After Spinal Anesthesia

中文摘要

研究目的：施行脊髓麻醉後，以睡枕頭之有無探討枕部高度對於脊膜穿刺後頭痛發生率有無不同。假設施行脊髓麻醉後，讓病患睡枕頭平躺，對硬脊膜穿刺後頭痛（Postdural puncture headache, PDPH）的發生率可能並無不同；因國內外相關之臨床護理實務，仍遵從過去脊髓麻醉後照護標準：須嚴格執行麻醉後平躺 6 至 8 小時，且不可睡枕頭之護理措施。此護理措施是否會進一步影響病患舒適度及病患術後滿意度，亦有待探討。故此研究之目的乃以實證醫學為依據，期望此研究結果，能提供脊髓麻醉照護準則之參考，使護理人員對麻醉醫學進一步的認識，以提升對病人麻醉恢復期的照護能力，並增加病患舒適及滿意度。

方法：本研究經人體試驗委員會審核通過，隨機分成兩組(實驗組及控制組)之臨床研究計畫，依統計考驗力分析計算在 $\alpha = .05$ 及 $\beta = .2$ 的期待條件下，每組所需人數為 500 人。選擇施行脊髓麻醉之對象為 18 至 50 歲，麻醉危險分級Ⅰ～Ⅱ之低危險群病人，以 25 號脊椎穿刺針(Quincke needle)予 0.5% Marcaine 10-15 毫克局部麻醉劑。隨機分為實驗組(睡枕頭)及控制組(不睡枕頭)，分別於手術結束後的 24、48 及 72 小時，由研究者詢問病人有無硬脊膜穿刺後頭痛發生。以學者 Croker 的分類標準來評估頭痛嚴重程度，並使用視覺的類似語等級法 VAS(Visual Analog Scale)來評估頭頸部僵硬酸痛程度和病患麻醉滿意度。

研究結果：實驗組(睡枕頭)及控制組(不睡枕頭)在脊髓麻醉後 PDPH 發生率，在統計上並無顯著差異，但在肩頸痠痛程度和麻醉病患滿意度方面，統計結果：為實驗組肩頸痠痛程度(1.57 分)小於控制組(3.23 分)；而麻醉病患滿意度調查結果為實驗組的 8.07 分，高於控制組的滿意度調查結果 7.95 分，雖兩組平均分數差異不大，但統計結果皆為 $p < .05$，表示實驗組和控制組在統計上有差異。

結論：適宜的枕部高度並不會影響 PDPH 發生率，但卻能改善脊髓麻醉後肩頸痠痛程度，且能增加麻醉滿意程度。

英文摘要

Background： To investigate the incidences of postdural puncture headache(PDPH)after spinal anesthesia between different occipital altitude. We assumed a hypothesis that the incidences of PDPH after spinal anesthesia under different occipital altitude were equivalent. On the basis of traditional nursing care standard protocols, patients should be kept straight in supine position without any pillow for at least six to eight hours after spinal anesthesia. However, further investigations are needed to disclose if these aforementioned nursing protocols would

influence postoperative patient satisfaction. In addition to examining the usefulness of pillow support with regard to prevention of PDPH , this study also updates the post spinal anesthesia care protocols to provide a better quality of patient care.
Material & method: This clinical study was approved by Tri-service general hospital joint IRB. A prospective, randomized, control study was conducted to examine the effect of pillow support in relationship with incidence of post dural puncture headache within 24, 48, and 72 hours postoperatively in two patient groups. Data were analyzed using the SPSS statistical package (power setting α= .05 and β= .2). 1000 patients (age ranged from 18 to 50 years old; ASA class I or II) were randomly allocated to receive pillow support (study group), or without pillow support (control group). All patients received spinal anesthesia with 0.5% Marcaine 10-15mg by 25 gauge Quincke needle. PDPH severity was assessed with Croker's classification; neck stiffness and satisfactory degree were assessed with VAS (Visual Analog Scale).
Results: No differences were observed in the incidences of postdural puncture headache(PDPH)after spinal anesthesia with or without pillow support. There were significantly less neck stiffness and significantly improved patients satisfaction in the study group.
Conclusions: Pillow support after spinal anesthesia reduces neck stiffness and improves patient satisfaction without an increase on the incidence of postdural puncture headache(PDPH).