磁石對退化性膝關節炎之療效

The Therapeutic Effects of Magnets on Knee Osteoarthritis

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摘要

磁場在臨床上已被運用於神經、肌肉、骨骼疼痛之緩解。本研究之主要目的為評估磁石對於退化性膝關節炎之影響。研究方法採雙盲測試，收錄退化性膝關節炎患者共 20 名，分別給予穿戴磁石護套，其中 10 個內含磁石，另外 10 個內含假磁石。所有患者將磁石護套佩戴於疼痛之膝關節部位 1 週，期間除沐浴盥洗外，一律穿戴。分別於施用前，施用 1 小時後，1 天後，及 1 週後，用 Visual Analogue Scale （VAS）及 Lequesne's Index 來評估其影響，研究進行前 1 週及當週，停止使用所有抗發炎止痛劑，但給予紅外線淺部熱療。研究進行中除了 1 名患者，因於第 1 次及第 2 次 Lequesne's Index 之走路試驗中，過度勉強行走而造成膝關節腫脹退出研究之外，分析時總共 9 名使用磁石護套另 10 名使用假磁石護套。結果顯示，於施用 1 小時後及 1 天後兩組間未達統計差異，而於施用一週後，不論 VAS 及 Lequesne's Index,佩戴磁石組都比佩戴假磁石組有較明顯之改善，達統計上顯著差異（p<0.05）。本研究顯示磁石護套對於減緩退化性膝關節炎症狀有顯著之影響。

Abstract

Background and purpose: Magnets had been applied in the relief of musculoskeletal pain for years. We conducted a double blind study to assess the efficacy of magnets on knee osteoarthritis. Methods: Twenty subjects were recruited in our study. All patients wore braces over the painful knee areas all day long for 1 week except the time of bathing.Ten bands containing magnets and the other 10 bands containing placebos were used in our study. 4 times of measurements were performed before application, 1 hour, 1 day, and 1 week after application. Measurements were obtained by using Visual Analogue Scale (VAS) and Lequesne's Index. No NSAID was given but superficial infrared ray therapy was given 1 week before and the week during the study. Results: Nine patients in the magnet group and 10 patients in the placebo group were included, as 1 patient dropped out due to the knee swelling caused by over walking in the walking test of the first and second

Lequesne's Index evaluation. There was no significant difference between the magnet group and placebo group 1 hour and 1 day after the application. However, the magnet group showed a significant improvement in the VAS and Lequesne's Index compared with placebo group 1 week after the application. Conclusion: Magnets had a significant effect of pain reduction on the knee osteoarthritis.