郭藍遠 教授

醫學院/運動醫學系

- 獲得未來科技展未來技術創新獎和國家新創獎學研新創獎，並於 2024 年成為歐洲運動科學學會會士

腕隧道症候群是一種常見的手腕問題，會造成手指麻木、疼痛和無力，俗稱滑鼠手。這種症狀在一般人群中的發病率大約是 4.9%。目前，雖然有一些研究關注肌貼對腕隧道症候群的影響，但關於它如何改變神經功能的研究還很少。本研究的目的是了解肌貼對輕度至中度腕隧道症候群患者的手掌麻木、疼痛、握力和神經功能的影響。

這項研究選擇了 27 名診斷為腕隧道症候群的患者，並將他們隨機分為兩組：一組接受肌貼治療，另一組作為對照組。研究人員在治療前和治療六週後，測量了受試者的握力、手腕功能以及神經檢查。結果顯示，無論是接受肌貼治療的組別還是對照組，受試者的麻木感、握力和手腕功能都有顯著改善。然而，接受肌貼治療的組別，握力改善更為明顯，增長了 2.21 公斤，而對照組僅增長了 0.70 公斤。統計分析顯示兩組之間的差異是顯著的。

這項研究顯示，肌貼治療能有效減輕腕隧道症候群的疼痛，增強手部的握力，並改善神經功能。這表明肌貼可能是一種有益的輔助療法，對緩解症狀有一定幫助。

研究論文：Chen W.H†, Willy Chou†, Hsu M, You Y.L, Wang Y.L, Cheng Y.Y, Lui I.T, Liu C.C, **Guo L.Y***, Nov 2024 “Effects of Kinesio tape on individuals with carpal tunnel syndrome: A randomized controlled study” Frontiers in Rehabilitation Sciences, 5:1-10(Correspondence Author, **SCI**, REHABILITATION, **IF:1.3**)
(*106CM-KMU-12 and NSTC 113-2622-H-037-001*)

具體成果：

1. 2024 年歐洲運動科學學會會士

2. 高雄醫學大學 112 學年度 產學合作優良獎

【研究團隊】

團隊成員：

郭藍遠(https://wac.kmu.edu.tw/qur/profiles.php?id=935025)、徐敏

團隊簡介：

郭藍遠教授致力於生物力學、醫學工程、動作科學、運動醫學等領域的研究，曾獲得未來科技展未來技術創新獎和國家新創獎學研新創獎，並於 2024 年成為歐洲運動科學學會會士，郭教授未來也將率領研究團隊持續貢獻於學術界。

研究聯繫 Email：yuen@kmu.edu.tw

Carpal tunnel syndrome (CTS) is a common wrist problem that causes numbness, pain, and weakness in the fingers. The incidence rate of CTS in the general population is about 4.9%. Although some studies have looked into the effects of Kinesio Taping (KT) on CTS, there is limited research on how KT affects nerve function. The aim of this study was to examine the effects of KT on palm numbness, pain, hand grip strength, and nerve function in individuals with mild to moderate CTS.

The study included 27 participants diagnosed with CTS, who were randomly assigned to either the KT treatment group or a control group. The researchers measured grip strength, wrist function (using the Boston Carpal Tunnel Questionnaire), and nerve function (via electroneurography) before and after 6 weeks of treatment. The results showed that both the KT group and the control group had significant improvements in numbness, grip strength, and wrist function. However, the KT group showed a more noticeable improvement in grip strength, with an increase of 2.21 kg, compared to the control group's increase of only 0.70 kg. Statistical analysis revealed a significant difference between the two groups.

This study indicates that KT can effectively reduce pain, enhance grip strength, and improve nerve function in individuals with CTS. This suggests that KT may be a helpful supplementary treatment for alleviating CTS symptoms.

Research paper: Chen W.H†, Willy Chou†, Hsu M, You Y.L, Wang Y.L, Cheng Y.Y, Lui I.T, Liu C.C, **Guo L.Y***, Nov 2024 "Effects of Kinesio tape on individuals with carpal tunnel syndrome: A randomized controlled study" Frontiers in Rehabilitation Sciences, 5:1-10(Correspondence Author, **SCI**, REHABILITATION, **IF:1.3**) (*106CM-KMU-12 and NSTC 113-2622-H-037-001*)

Concrete Results:

1. European College of Sport Science, Fellow
2. Kaohsiung Medical University, 2024Excellent Industry-Academia Collaboration Award

【Research Team】

Team Members:

Lan-Yuen Guo (https://wac.kmu.edu.tw/qur/profiles.php?id=935025)、

Min Hsu

Research Team Introduction: Professor Guo is dedicated to research in the fields of biomechanics of human movement, medical engineering, movement science, and sports medicine. He has received the Future Technology Exhibition Future Technology Innovation Award and the National Innovation Award in the Academic Research Category. In 2024, he was elected as a Fellow of the European College of Sport Science. The professor will continue to lead his research team in making significant contributions to the academic community.

Research Contacts Email: yuen@kmu.edu.tw