

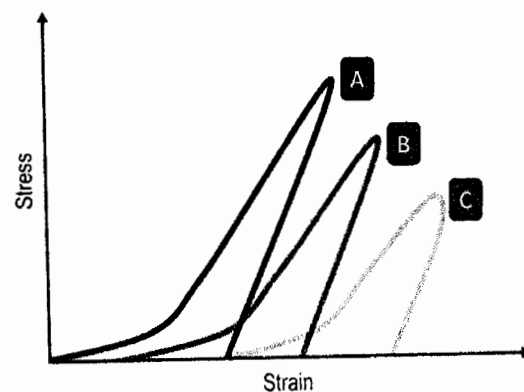
※ 考生請注意：本試題不可使用計算機。請於答案卷(卡)作答，於本試題紙上作答者，不予計分。

一、解釋名詞 (25%) 每題 5 分

1. akathisia
2. ankylosis
3. episodic memory
4. gamekeepers deformity
5. intentional tremor

二、問答題 (45%)

1. Penny is a 21 years old lady who had a traffic accident on her way to work three months ago. This accident makes her a complete spinal cord injury at the C5 level for both sides. After a period of rehabilitation training in the hospital stay, she is going to discharge and go back home recently.
依據上所列之描述及職能治療之「代償/調適介入途徑」原則及方法，試問有哪三種代償/調適介入途徑的應用方法，並依各應用方法試列舉出實例以利個案之職能表現？(15%)
2. 某君因右手肘部位脫位(elbow dislocation)以石膏固定數周，在拆除石膏後，發覺手肘關節僵硬，關節周圍之韌帶及關節囊均有攣縮的現象，導致無法有適度之關節活動度，因此求助於你(職能治療師)以解決此一問題。下圖為一個向病患解釋疾病特性及復健療程的重要且好用的圖示，試問你如何運用該圖解釋目前病患之疾病特性及復健療程給予個案了解呢？(15%)



3. 某君於腦傷後出現了「穿衣失用症(dressing apraxia)」的情形，請問可能有哪些因素會導致此失用症的發生，針對不同因素的介入方式又為何呢？(15%)

三、文獻閱讀題(30%)

1. 請閱讀此文章摘要並回答相關問題：

Association of Functional Status With Changes in Physical Activity: Insights From a Behavioral Intervention for Participants With Arthritis

Joe Feinglass, PhD, Jing Song, MS, Pamela Semanik, PhD, Jungwha Lee, PhD, Larry Manheim, PhD, Dorothy Dunlop, PhD, Rowland W. Chang, MD, MPH

ABSTRACT. Feinglass J, Song J, Semanik P, Lee J, Manheim L, Dunlop D, Chang RW. Association of functional status with changes in physical activity: insights from a behavioral intervention for participants with arthritis. *Arch Phys Med Rehabil* 2012;93:172-5.

Objective: To analyze change over 6 months in accelerometer-measured physical activity for participants with arthritis in a physical activity promotion trial. We tested the hypothesis that participants with the highest baseline functional capacity, regardless of their intervention status, experienced the greatest increases in physical activity levels at 6-month follow-up.

Design: At baseline, participants were interviewed in person, completed a 5-minute timed walk, and wore a biaxial accelerometer for 1 week, with a subsequent week of accelerometer wear at 6 months. We present data on the changes in accelerometer-measured physical activity across baseline function quartiles derived from participants' walking speed. Analyses were controlled for sociodemographic, health status, and seasonal covariates as well as exposure to the study's behavioral intervention.

Setting: A Midwest academic medical center.

Participants: Participants (N=226) with knee osteoarthritis or rheumatoid arthritis currently enrolled in the Improving Motivation for Physical Activity in Persons With Arthritis Clinical Trial.

Intervention: Counseling by physical activity coaches versus control group physician advice to exercise.

Main Outcome Measure: Change in average daily counts between baseline and 6-month follow-up.

Results: Contrary to our hypothesis, and after controlling for other predictors of change, the lowest quartile function participants had the largest mean absolute and relative physical improvement over baseline, regardless of intervention group status.

Conclusions: Participants at a higher risk of immanent mobility loss may have been more committed to improve lifestyle physical activity, reflecting the wisdom of targeting older adults at risk of mobility loss for physical activity behavior change interventions.

Key Words: Arthritis; Rehabilitation.

(1) 請簡單說明此研究的用意及實驗設計為何？(5%)

(2) 請問作者於此實驗中可能運用到的統計方法為哪些？理由為何？(5%)

2. 請閱讀此文章摘要並回答相關問題：

Individual finger synchronized robot-assisted hand rehabilitation in subacute to chronic stroke: a prospective randomized clinical trial of efficacy

Clinical Rehabilitation
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sagepub.co.uk/journalsPermissions.nav
DOI: 10.1177/0269215511431473
cre.sagepub.com


Chang Ho Hwang, Jin Wan Seong and Dae-Sik Son

Abstract

Objective: To evaluate individual finger synchronized robot-assisted hand rehabilitation in stroke patients.

Design: Prospective parallel group randomized controlled clinical trial.

Subjects: The study recruited patients who were ≥ 18 years old, more than three months post stroke, showed limited index finger movement and had weakened and impaired hand function. Patients with severe sensory loss, spasticity, apraxia, aphasia, disabling hand disease, impaired consciousness or depression were excluded.

Interventions: Patients received either four weeks (20 sessions) of active robot-assisted intervention (the FTI (full-term intervention) group, 9 patients) or two weeks (10 sessions) of early passive therapy followed by two weeks (10 sessions) of active robot-assisted intervention (the HTI (half-term intervention) group, 8 patients). Patients underwent arm function assessments prior to therapy (baseline), and at 2, 4 and 8 weeks after starting therapy.

Results: Compared to baseline, both the FTI and HTI groups showed improved results for the Jebsen Taylor test, the wrist and hand subportion of the Fugl-Meyer arm motor scale, active movement of the 2nd metacarpophalangeal joint, grasping, and pinching power ($P < 0.05$ for all) at each time point (2, 4 and 8 weeks), with a greater degree of improvement for the FTI compared to the HTI group ($P < 0.05$); for example, in Jebsen Taylor test (65.9 ± 36.5 vs. 46.4 ± 37.4) and wrist and hand subportion of the Fugl-Meyer arm motor scale (4.3 ± 1.9 vs. 3.4 ± 2.5) after eight weeks.

Conclusions: A four-week rehabilitation using a novel robot that provides individual finger synchronization resulted in a dose-dependent improvement in hand function in subacute to chronic stroke patients.

- (1) 請問本研究的實驗設計是屬於橫斷面觀察型之研究嗎？若非，其屬於何種型態之研究設計；若是，請描述其觀察之病患種類為何及其關差之因子為何？(5%)
- (2) 請問此研究之介入策略有可能運用到的職能治療參考架構為何？(5%)
- (3) 請問此研究的結果可提供給臨床的建議及價值為何？(10%)