

HAC 2016 ABSTRACT for Oral Presentations

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Project title

A Structured Physiotherapy Rehabilitation Model for Trigger Fingers(彈指有法): Cost-effectiveness and Sustainability

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Introduction

Trigger finger(TF) is a common overuse disorder with large number of referrals for physiotherapy yearly. A well-structured physiotherapy program was conducted since April 2013 to improve treatment efficiency.

Objectives

1. To provide a stratified cost-effective treatment model for TF patients. 2. To compare its effectiveness with conventional treatment.

Methodology

TF patients without surgery, age 16-70 or >70 if motivated, were recruited to an education session with ergonomic advice, recurrence prevention and patient empowerment. After that, they were stratified into two treatment pathways. (1)Grade 1-2 TF were assigned to structured exercise classes(TF class) for pain management, specific mobilization, stretching and strengthening. (2)Grade ≥3 or inflammatory cases were assigned to individual treatment with exercise and electrotherapy. Those could not attend education session nor TF class schedule were assigned to conventional individual treatment(CIT) with exercise and electrotherapy.

Result

297 TF patients attended education sessions from April 2013 to February 2015. Patients with Grade 1-2 TF(n=187;63%) were stratified to TF classes and the mean treatment sessions were 3.53, (sd=1.25). Those with Grade≥ 3 TF or inflammation(n=110; 37%) were stratified to individual treatment. They were excluded in data analysis. 35 patients(Grade 1-2, 5 had bilateral TF) were assigned to CIT group and the mean treatment sessions were 6.02, (sd=2.56). With baseline demographics comparable, both TF class group and CIT group had significant improvement in pain, triggering grading and power grip(p<0.05). 100% TF class subjects reported ≥70% overall improvement(NGCRS). 87% CIT subjects reported ≥70% overall improvement. 149 patients(TF class: 129, CIT: 20) were able to be contacted by phone at 3-month post-discharge. 84%TF class and 75%CIT patients reported ≥70% improvement maintained. 97 TF class patients were telephone-interviewed at 1 year post-discharge. 81%(n=79) reported at least 70% improvement maintained. 76%(n=74) reported no recurrent episode. Majority did not need further physiotherapy treatment (91%,n=89) nor complementary therapy(84%,n=82). 4 patients received steroid injection and nil had surgery. Improvement in manpower utilization: The number of sessions saved was 6.02-3.53=2.49 for each TF class patient. The sessions and time saved can allow intake of about 70% of additional new TF patients. Conclusion: TF program stratified patients with different severity to appropriate treatment pathways which were shown to be cost-effective. The service re-engineering saved treatment sessions and empowered patients; yet still achieved satisfactory improvement which could be maintained at 1-year follow up.