



Service Priorities and Programmes
Electronic Presentations

Convention ID: 409

Submitting author: Ms Alice CHIU

Post title: Senior Physiotherapist, The Duchess of Kent Children Hospital, HKWC

Effectiveness of Electromagnetic Therapy in Treatment for Patients with Painful Hand Condition

Tong CWF (1), Fung KKB (2), CHIU YYA (1)

(1) Physiotherapy Department, The Duchess of Kent Children's Hospital at Sandy Bay

(2) Department of Orthopaedics and Traumatology, Queen Mary Hospital

Keywords:

Electromagnetic Therapy

Trigger Finger

Effectiveness

Physiotherapy

Painful Hand Condition

Introduction

INTRODUCTION Trigger finger (stenosing tenosynovitis) is commonly seen painful hand condition referred for physiotherapy. The pain and inflammation induced from the repetitive use of fingers with stenosing tenosynovitis causing triggering will cause functional impairment in one's daily life and work. Recently our department has incorporated the use of Electromagnetic Therapy in treating trigger finger and a study was carried out to evaluate its effectiveness.

Objectives

OBJECTIVES To study the effectiveness of electromagnetic therapy in the treatment of trigger finger.

Methodology

METHODOLOGY Patients with trigger fingers were referred for physiotherapy after orthopaedic consultation. They were treated with 8 weeks of electromagnetic therapy with two sessions a week. Assessments were done before treatment, at 8 weeks and 3 months. Severity of finger triggering, pain level, power and pinch grip and fingers range of motion were assessed. Patient's satisfaction was also recorded

Result

Result and Outcome From June to November 2013, 20 subjects were included in the study, 14 were female and 6 were male with mean age of 59.6 years. For symptomatic improvement: pain had decreased significantly ($p=0.00$) from mean numeric pain rating scale (NPRS) from 5.8 to 2.1 at 8 weeks and to 1.5 at 3 months. For functional outcome: pinch strength had improved significantly ($p=0.04$) from mean strength 3.3kg to 3.7kg at 3 months and power grip strength also improved significantly ($p=0.01$) from 16kg to 19.9kg at 3 months. For measuring disease severity using Wolfe's classification (grade I to IV), 8 of the 20 patients became normal at 3 months. Number of subjects graded as Wolfe's classification III & IV were decreased from 5 to 1. 75%

of the patients were satisfied with the treatment. CONCLUSION The use of electromagnetic therapy is effective in treating trigger finger. It is recommended to include this non invasive intervention into physiotherapy treatment program.