



Service Priorities and Programmes
Electronic Presentations

Convention ID: 105

Submitting author: Miss Ho Yan TAI

Post title: Physiotherapist II, Prince of Wales Hospital

The Benefits of Exercise Education Classes for Adult Patients having undergone Elective Hepatobiliary and Pancreatic (HBP) Surgery in PWH: A Pilot Study

Tai HY, Fong WK, Wong I, Wu CM

Physiotherapy Department, Prince of Wales Hospital

Keywords:

Physiotherapy

Exercise

Hepatobiliary and Pancreatic Surgery

Introduction

Both wound pain and lack of understanding of the operation and importance of exercise are major factors for reduced activity level and exercise capacity for HBP patients. In order to reduce the complications of reduced activity level and alleviate patients' uncertainties and anxiety for exercise peri-operation, we promulgated the concept of early mobilization and active exercise. Therefore, physiotherapists in PWH organized exercise education classes for patients who undergone elective HBP surgery in 2016.

Objectives

This trial aims to determine the effect of exercise education classes on patients' exercise capacity and knowledge on exercise before and after the classes.

Methodology

With the consensus of team physician, nine patients who undergone elective HBP operation were enrolled to attend total 3 sessions of exercise education classes at pre-operation, post operation and post-operative three months. The classes comprised of assessment, exercise education (warm up and cool-down exercise, aerobic exercise and strengthening exercise), and evaluation. Exercise capacity was assessed using the validated Incremental shuttle walking test (ISWT) with close telemetry monitoring while strength was assessed using hand grip test in each session. Quiz on exercise knowledge was used for testing knowledge on exercise before and after the exercise education classes.

Result

SPSS 20.0 was used for statistical analysis. Repeated measures ANOVA was performed to determine if there are any significant changes of ISWT and hand grip strength among the three periods. Pair t-test was performed to determine if there is any significant difference in the quiz results before and after the education classes. The significant level was set at $p < 0.05$.

Nine patients (7 males and 2 females) completed the exercise education classes. No complication was noted. The ISWT distance had a significant increase by 58.9% within subjects after the completion of classes ($p=0.003$) while there is no significant difference in hand grip strength. Significant increase in patients' knowledge on exercise ($p = 0.000$) was also noted after the exercise education classes. We observed significant improvement in exercise capacity and enhanced knowledge for these nine HBP patients. Their recovery after operation was enhanced. In order to further verify the efficacy of this exercise education classes, a larger study sample and refined study design are suggested in further studies.