



Service Priorities and Programmes
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Pre-operative Physiotherapy Exercise Is Beneficial in Weight Reduction for Morbidly Obese Patients

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Introduction

Managing morbidly obese patients pose unique challenge to health care workers and it requires holistic cooperation from multi-disciplinary expertise. Surgery has been proven as the most effective and durable modality for weight control. Modification of life-style including physical exercise is crucial to achieve success. Local evidence on the contribution from pre-operative physical activity is lacking.

Objectives

The purpose of the present study is to investigate the effectiveness of preoperative physiotherapy in weight control for morbidly obese patients after sleeve gastrectomy.

Methodology

Between 2010 and 2013, a program of aerobic exercise was offered to eligible patients before sleeve gastrectomy. Service review of weight reduction in patients with good compliance was compared to those of poor compliance to the program.

Result

Seventy-nine patients were enrolled to the program during the study period. A total of 22 patients underwent sleeve gastrectomy, the median age was 41 years (range 23 - 61 years), and 6 were men. The median body weight was 99.9 kg (range 82.0 kg -121.7 kg) and the mean BMI was 39.8 ± 5.9 kg/m². Of the 22 patients, 9 patients (41%) showed good compliance to the program and attended physiotherapy frequently, from 3-9 visits before operation. Before operation, the mean weight loss of the good compliance group was 2.5 kg (range -1.0 to 17.5 kg) representing 1.93% (range -1.2 to 12.5%) of the presenting body weight whereas the respective figures for the poor compliance group were 2.6 kg (range -6.5 to 9.4 kg) representing 2.6% (range -5.3 to 9.0%), $p=0.725$, Independent t-test. After operation, the weight control of those with good compliance was significantly better than the other 13 patients (59%) who were

less compliant. At the 6th month after the operation, the mean weight loss of the good compliance group was 26.7 kg (range 10.5 - 43.0 kg), representing 24.8% of the initial body weight and was significantly better than the poor compliance group, 20 kg (range 12 – 29.1 kg), 18.9% (range 13.5 - 23.9%) of the initial body weight, $p=0.032$ Independent t-test). Pre-operative physiotherapeutic exercise program build up a healthier life-style and enhance the weight control effect after bariatric surgery in morbidly obese patients.