

# Service Priorities and Programmes Electronic Presentations

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Submitting author: Dr C W HO

Post title: Resident, United Christian Hospital, KEC

## Changes in metabolic profile after sleeve gastrectomy in a regional hospital in Hong Kong

Dr. CW Ho, Dr. G Kam, Dr. MW Tsang Department of Medicine and Geriatrics, United Christian Hospital.

### **Keywords:**

obesity

### **Introduction**

Obesity is becoming a pandemic. It is associated with multiple co-morbidities and bariatric surgery had been introduced as a mean of treatment of obesity and related co-morbidities.

#### **Objectives**

This study aimed at reviewing the metabolic changes after laparoscopic sleeve gastrectomy among Hong Kong Chinese in a regional hospital.

#### Methodology

47 patients who received laparoscopic sleeve gastrectomy in the United Christian Hospital from June 2008 to Oct 2012 were retrospectively reviewed. Changes in body weight, glycaemic control, lipid profile and medication were recorded.

#### Result

The mean age of study population was 43.7 ( range 19-63) years. The mean body mass index before operation was  $39.7\pm4.6$  kg/m2. The mean % excess weight loss (% EWL)\* was  $53\pm4.7$ % at post-operative one year. Mean HbA1c reduced from  $7.8\pm0.3$ % to  $6.6\pm0.2$ % at post-operative 3 months (p<0.05). 50% of patients had reduction in number or dosage of anti-hypertensive medication at post-operative one year. Lipid profile also showed improvement with mean triglyceride reduced from  $1.8\pm0.1$  mmo/l to  $1.0\pm0$  mmol/l (p<0.05) and mean high density lipoprotein increased from  $1.2\pm0$  to  $1.4\pm0.1$  mmol/l (p<0.05) at baseline and at one year after the operation respectively. Conclusion: Laparoscopic sleeve gastrectomy showed favourable changes in several aspects of metabolic parameters. The mechanism of improvement in addition to effect from weight loss was still unclear. \* . % EWL = [weight loss achieved / (pre-operative body weight – ideal body weight)] x100%.