

# The Beneficial Effects of a Very-Low-Calorie-Diet (VLCD) in the Peri-operative Preparation for Laparoscopic Gastric Banding Surgery



Serene WH TAY<sup>1</sup> (BSc, PGDipDiet), Beng-Hea TEY<sup>1</sup> (MBBS, M.Med (Int. Med.)), Haridas G BALADAS<sup>2</sup> (MBBS, FRCS), Gladys HC WONG<sup>1</sup> (MSc, PGEduDietetics)

## Objectives

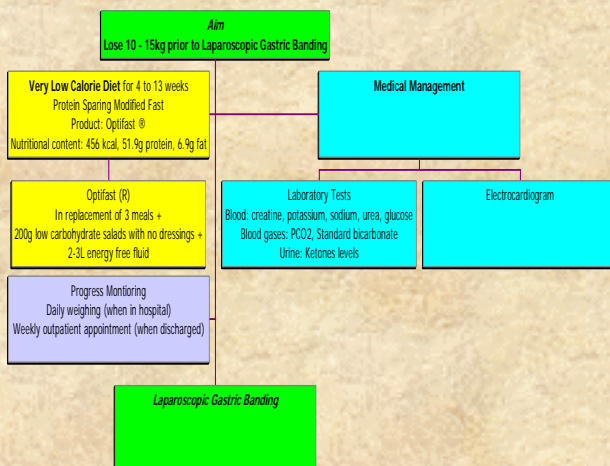
- 1.To improve co-morbidities
- 2.To improve the ease of operation
- 3.To reduce mortality risk

## Introduction

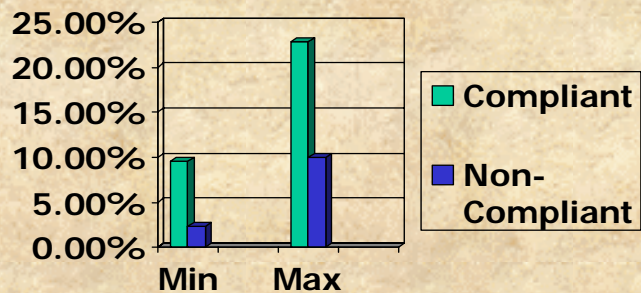
Laparoscopic bariatric surgery in the obese patient (Asian BMI  $\geq 32.5$  kg/m<sup>2</sup> with co-morbidity or  $\geq 37.5$  kg/m<sup>2</sup> without) is made technically difficult by copious intra-abdominal fat that obscures the laparoscopic view from below and a large fatty liver from above. Peri-operative risk is also increased from obstructive sleep apnoea and other co-morbidities.

Eight patients (BMI range from 44.7 – 100 kg/m<sup>2</sup>) from the Alexandra Hospital Weight Management Programme were prescribed a commercial VLCD formulation for 4 – 12 weeks prior to the Laparoscopic Gastric Banding. Patients were expected to follow the VLCD regimen, aiming at optimal weight loss to ease the operation.

## Method



## Results



Percentage weight loss range from 9.6% - 22.8% in compliant patients, verses 2.4% - 10% in non-compliant patients.

Two patients who had diabetes and high blood pressure had their medication stopped or dosage reduced.

A preliminary controlled study was done confirming an improvement in surgical access in patients on VLCD (in publication).

## Conclusion

Results indicated that amount of weight loss is not only dependent on the duration of VLCD but also motivation and compliance of the patient to VLCD. Patients compliant with VLCD had more weight loss.

Poor compliance to VLCD could be due to the lack of variation of VLCD available and sustainability issues.

Regular encouragement and monitoring of patient on VLCD should be done to improve their compliance.

## Future Plans

Aim:

To increase compliance to VLCD and optimal weight loss for easing surgical access, concentrate in intensive supervision of peri-operative VLCD for 2-3 weeks.

1= Alexandra Hospital, 2= Raffles Hospital