PRELIMINARY RESULTS OF SLEEVE GASTRECTOMY PERFORMED IN A MULTIDISCIPLINARY ENVIRONMENT

Kim Tang [2], Michele Van Vuuren[1], Michelle Graham[1], Shirley Lockie[1], Phil Lockie[1]

[1]Brisbane Institute of Obesity Surgery, Brisbane, Australia, [2]Ipswich General Hospital, Ipswich, Australia

Bariatric surgery patients have a high prevalence of mental health disorders and abnormal eating behaviours, in particular pre-surgery binge eating. Binge eating remits for the first 6-12 months post surgery and preoperative binge eating does not predict poorer weight loss within the initial 6-24 months post surgery. However in the longer term, patients with preoperative binge eating behaviours are at higher risk of redeveloping problematic eating behaviours. These problematic eating behaviours are associated with a high risk for weight regain.

In addition to sleeve gastrectomy, patients in this case series were managed in a structured program of pre and postoperative interventions in an effort to mitigate the re-emergence of abnormal eating behaviours and provide psycho-education on the psychosocial transitions, lifestyle and behavioural changes required post surgery.

The Multidisciplinary environment for the series:

All patients had initial consultation with the Bariatric coordinator, prior to consultation with surgeon, psychologist and dietitian.

They then had a second pre-op consultation with psychologist, dietitian and surgeon, before further workups and surgery.

In addition, each patient also had two further psychology and dietician consultations post operatively.

Throughout their follow up, patients have the optional access to an exercise physiologist and a monthly support group facilitated by the psychologist.

Patients are supported with on-going availability of e-mail and mobile phone text support from bariatric coordinator.

Method:

Data from the record of 188 consecutive sleeve gastrectomy performed between Oct 2007 to June 2012 by a single surgeon.

Typical follow-up 3 monthly for 12 months, 6 months for next 12 months, then annually.

For the purposes of this study an additional email or a phone call was made to each patient to obtain their most recent weight.

Patients who required additional bariatric procedures or had major post operative complications or not reached 3 month post-op were excluded.

Sleeve gastrectomy-

- performed over 38F bougie
- staple line started 2-4 cm from pylorus and was not oversewn
- buttressing material used in later cases
- average length of stay of 2 days

Results:

177 patients, with 41 (23.2%) male

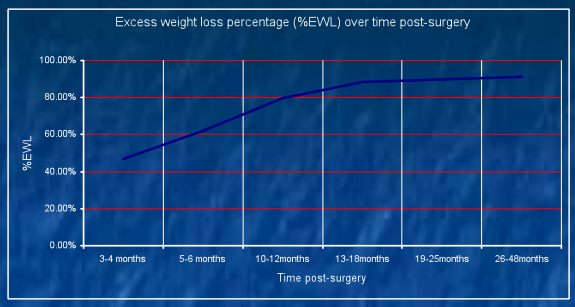
Mean age of 44.38 (range 21-75)

Mean pre-op BMI 43.28 (range 31.6- 79.8)

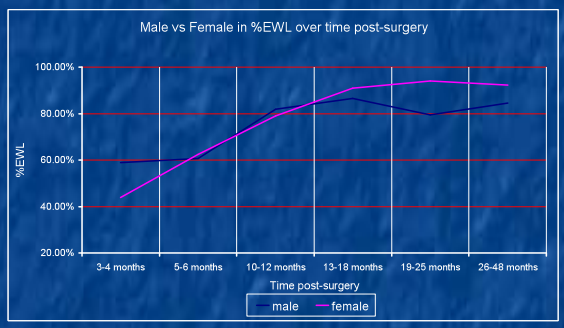
60 (33.9%) patients were diagnosed with depression in their past medical history

Mean percentage of excess weight loss:
(%EWL, with BMI 25 as ideal weight)

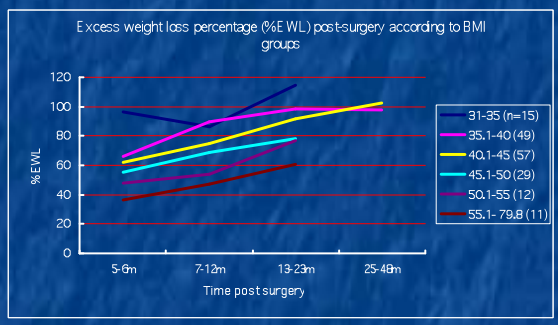
46.80% at 3-4 months (n=63)
61.99% at 5-6 months (n=52)
79.74% at 10-12 months (n=45)
88.35% at 13-18 months (n=31)
89.95% at 19-25 months (n=32)
91.29% at 26-48 months (n=22)



Patients in this series were able maintain most of their weight loss over 4 years



Females were more compliant with follow-up than males; and have a slightly better result overall



Conclusion:

Weight-loss in this series appear better than most reported in the literature- average reduction of BMI of 14.58kg/m2 at 1 year, compared to 11.87kg/m2 (Hutter et al, 2011)

Long term results are likely to be optimized with this multidisciplinary approach

References

Dillard BE et al. **Initial experience with the adjustable gastric band in morbidly obese US adolescents and recommendations for further investigation.** *J Pediatr Gastroenterol Nutr.* 2007;45(2):240

Maggard M et al. **Meta-Analysis: Surgical Treatment of Obesity.** *Annals of Internal Medicine* 2005;142(7) pp 547-559

Rubin M et al.**LA Laparoscopic sleeve gastrectomy with minimal morbidity. Early results in 120 morbidly obese patients.** *Obes Surg.* 2008;18(12):1567 (53+/-24% at 11.7months)

Juan J et al. **Comparison of comorbidity resolution and improvement between laparoscopic sleeve gastrectomy and laparoscopic adjustable gastric banding** *Surg Endosc* (2010) 24:2513–2517

F. Langerm et al. **Strategies for weigh regain after sleeve gastrectomy** *Surgical laparoscopy endoscopy and percutaneous techniques* (2010) 20:3 pp. 159-161

M. Rusch & D. Andris **Maladaptive eating patterns after weight-loss surgery** *Nutrition in Clinical Practice* (2007) 22:41 pp. 41-49

J. Marino et al. **The emergence of eating Oathology after bariatric surgery: a rare outcome with important clinical implications** *international journal of eating disorder* (2012) 45; pp. 179-184

Z. Pataky et al. **Psychological factors and weight loss in bariatric surgery** *Current Opinion in Gastroenterology* (2011) 27; pp. 167-173