Preoperative characteristics of morbidly obese patients who achieved at least fifty percent excess weight loss post-metabolic Surgery

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Background
With the emergence of metabolic surgery as an effective and successful treatment option for obesity, the selection of obese patients who would benefit most from metabolic procedures is an on-going challenge in Bariatrics. Currently, defining patient characteristics such as health related Quality of Life (HRQOL) that would indicate suitability for metabolic surgery and would serve as outcomes of success, is unclear. Pre-operative predictive measures of post-metabolic surgery success would facilitate a more refined evidence-based selection of patients.

Objective
This study aimed at identifying clinical and psycho-social predictors of success (defined as excess weight lost 1 year post-operatively (towards an ideal BMI 25kg/m2) [EWL-1 year]) following metabolic surgery.

Methodology
26 patients who had completed one year follow up post-metabolic surgery.

Comparisons were made between pre-operative characteristics from two subgroups: patients with <30%, and >50% EWL-1 year

Pre-op HRQOL scores in Lower EWL-1 year group
No significant differences for all domains of HRQOL

Pre-op HRQOL scores in Higher EWL-1 year group

Pre/Post-operative data accrued including transposed IWQOL-Lite scores of physical function, self-esteem, sexual life, public distress and work related domains of obesity specific QOL.

Comparisons were made between pre-operative characteristics from two subgroups: patients with <30%, and >50% EWL-1 year

Pre-operative BMI and EWL-1 year
r=0.499, p=0.009

Pre-operative BMI and Public distress HRQOL
r= - 0.54, p=0.005

Pre-operative BMI and EWL-1 year

β=0.70, p=0.01

Pre-operative BMI and Self esteem HRQOL
r = -0.41, p=0.041

Conclusions
1) We show a significant, independent direct relation between the pre-op BMI and excess weight loss one year following metabolic surgery.
2) Pre-operative QOL measures were not predictive of EWL-1 year.

Take Home Points
1) Excess Weight Loss 1 year post metabolic surgery is determined by variable complex factors. Pre-operative QOL may predict other measures of metabolic surgical success, such as improvements in physical and psycho-social functioning, rather than absolute weight reduction.
2) Pre-operative BMI could be considered as one of the factors that predict successful weight loss post metabolic surgery.

References