



### INTRODUCTION

The prevalence of overweight and obesity within the United States has been increasing at an alarming rate with the majority of Americans having a body mass index (BMI) of greater than 25.<sup>1</sup> Obesity has been shown to have a direct impact on health with co-morbidites encompassing metabolic, cardiovascular, respiratory, gastrointestinal, and orthopedic diseases.<sup>2</sup> Quality of life is also significantly impacted including physical, psychosocial functioning and emotional well-being.<sup>3</sup>

The Moorehead-Ardelt Quality of Life Questionnaire (M-A QoLQ) has been validated as a reliable tool in assessing quality of life issues in the obese population.<sup>4</sup> We compared the quality of life data gathered prior to and 1 year following laparoscopic Roux Y gastric bypass (LRGB) using the M-A QoLQ on selected outcomes including self-esteem, physical, social, work ability, and sexual interest.

### METHODS

Two hundred and twenty seven consecutive patient records between August 2001 and February 2006 were analyzed for changes in quality of life measures. All patients were asked to fill out the M-A QoLQ prior to LRGB. All patients were operated by the same surgeon (PG) with the same technique and cared for by same core surgical team.

Patients were asked to complete a survey at their one-year follow up visit measuring the same quality of life issues addressed prior to the surgery. Of the 227 patients, 108 patient files were complete and analyzed, 69 patients did not complete the 1-year follow up questionnaire, and 48 patient files were excluded. All data were collected prospectively and paired t-tests were used to analyze the data.

### RESULTS

Participants who completed the MA-QoLQ prior to surgery and 1 year post surgery were found to show a significant improvement in their quality of life. The main areas of analysis included improvement in self esteem (CI 95% (0.451, 0.660) p< .001), physical activity (CI 95% (0.286, 0.419) p< .001), social interest (CI 95% (0.301, 0.441) p < .001), work interest (CI 95% (0.273, 0.400 p< .001) and sexual interest (0.317, 0.465 p< .001).

# **Quality of Life Significantly Improves After Laparoscopic Gastric Bypass Surgery**

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MA-QOL Q VARIABLES MEASURED		
Variable	CI	<b>P-value</b>
Self-esteem (Feel)	95% (0.451, 0.660)	p<0.001
Physical Activity	95% (0.286, 0.419)	p<0.001
Social Interest	95% (0.301, 0.441)	p<0.001
Work Interest	95% (0.273, 0.400)	p<0.001
Sexual Interest	95% (0.317, 0.465)	p<0.001

# DISCUSSION

Laparoscopic Roux Y gastric bypass (LRGB) surgery has been shown to provide sustained weight loss in the severely obese patient population and subsequent resolution of co-morbidities. In addition to improvements in health, subjective improvements in this patient populations' quality of life has also been noted.

This study utilized a simple quality of life assessment questionnaire developed and validated by Melodle K. Moorehead et al.<sup>4</sup> The questionnaire was given to record the patient's perceptions regarding his or her quality of life prior to and 1 year following LRGB.

The tool consisted of 5 questions with corresponding visual aides regarding self esteem, ability to participate in physical activity, interest in social activities, interest in work, and interest in sex, measured on a 10 point scale. The results showed a statistically significant improvement in all 5 categories of interest with an overall improvement in quality of life 1-year post-gastric bypass surgery.

The information from this study may provide a useful adjunct for the physician working with patients contemplating gastric bypass surgery. Further studies can be conducted using this data to assess whether differences in surgical techniques such as banding yields different results in overall quality of life improvements.

Limitations within this study included the 119 questionnaires that were unable to be analyzed due to incomplete pre or 1-year post operation quality of life questionnaires. Another limitation was the slight difference in the addition of 1 question in the pre-op quality of life questionnaire regarding interests towards food that was not included in the post-op questionnaire.

## CONCLUSION

In addition to weight loss and reduction of co-morbidities, LRGB produced significant improvement of quality of life in all measured parameters including self-esteem, physical, social, work ability, and sexual interest.

References

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<sup>2</sup> Klein S. Medical management of obesity. Surg Clin North Am. 2001;81:1025-38

<sup>3</sup> Kolotkin RL, Meter K, Williams GR. Quality of life and obesity. Obesity Review 2001; 2: 219-229

<sup>4</sup> Moorehead, MK, Ardelt-Gattinger, E, Lechner, H, Horacio, O. Obesity Surgery:13:684-692

