Impact of Body Contouring Procedures on Maintenance of Post-Bariatric Weight Loss

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Morbid obesity has significant impact on patients' physical and psychosocial conditions. There is negative interference in daily activities, overall quality of life, psychosocial distress and co-morbidities, such as hypertension and diabetes mellitus among others.¹⁻² Bariatric surgery has evolved as an effective tool to manage weight and associated co-morbidities. Following significant weight loss however, patients often experience residual problems due to the redundant skin with difficulty in maintaining personal hygiene, recurrent infections from friction, or functional impairment leading to physical inactivity.³ Furthermore up to 50% of bariatric patients regain some of the lost weight.⁴ Several papers have demonstrated the association of improved psychosocial status of bariatric patients after interventions, such as body contouring.⁵ To the best of our knowledge, no publication has reported an association with weight loss in minimally invasive sleeve gastrectomy patients undergoing body contouring. Our purpose was to examine whether body contouring is associated with improved % Excess Weight Loss (%EWL) specifically in post-sleeve gastrectomy patients.

Methods: Retrospective analysis of patients who underwent minimally invasive sleeve gastrectomy at the University of Illinois at Chicago Medical Center from March 2008 to March 2013. We identified patients who underwent abdominal lipectomy after bariatric surgery. Groups were compared in relation to demographics and co-morbidities. We compared the %EWL between patients undergoing abdominal lipectomy after minimally invasive sleeve gastrectomy with patients undergoing bariatric surgery alone.

Results: Institutional Review Board approval was obtained. A total of 262 consecutive patients underwent minimally invasive sleeve gastrectomy between March 2008 and March 2013. Eighteen consecutive patients fulfilled the inclusion criteria. Patient demographics and pre-surgical co-morbidities showed no significant differences (p>0.05) with and without body contouring. With the bariatric procedure as the reference time, statistically significant differences were found when comparing %EWL at 24 (p<0.0001), 36 (p<0.0001) and more than 36 months (p<0.005) follow-up between the groups. There was a greater %EWL in patients undergoing body contouring procedures after minimally invasive sleeve gastrectomy.

Conclusion: Based on our experience and preliminary information given the small sample size, we believe patients who underwent post-sleeve gastrectomy body contouring have improved %EWL than bariatric only patients. Although larger studies will be necessary to confirm, we propose plastic surgery be used as an extension in the overall treatment of bariatric patients to maintain long-term weight loss.

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