

Pennington Scientific Symposia
Bariatric Surgery: Do the Mechanisms Hold the Key for Novel Therapies?
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Needs Assessment:

Obesity has reached epidemic proportions and is a leading cause of death among Americans [1, 2]. Recent scientific and media attention has been given to the role of weight loss surgery as a method for weight reduction in severely obese individuals. Data suggest that long-term weight loss for conservative weight loss regimens is poor [3, 4]. In contrast, weight loss by surgical means is effective and long lasting. The average patient loses two-thirds of his/her body weight within the first year, and maintains 60% and 50% of the lost weight at 5 and 10 years, respectively [5-7]. A recent meta-analysis of laparoscopic gastric bypass (LRYGB) indicated that patients achieved 61.5%, 69.7%, and 71.2% excess weight losses (%EWL) at 1, 2, and >3 years, respectively [8].

There are several medical complications secondary to obesity that are ameliorated with profound weight reduction. The benefits of weight loss surgery on Type 2 diabetes [9-12], dyslipidemia, hypertension [10, 13], blood glucose levels [13], gastroesophageal reflux disease (GERD) [10, 14, 15], sleep apnea [10, 16] and asthma [10, 17] have been well documented.

Evidence of medical improvements following bariatric surgery is promising. However, much of the available research has utilized varying types of surgery, outcome measures, and lengths of follow-up periods. Thus, more research is needed on outcomes of different types of bariatric surgery over long-term follow-up periods, as well as novel approaches.....

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