Weight-related quality of life changes 6-months following Laparoscopic Sleeve Gastrectomy or Endoscopic Sleeve Gastroplasty
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Title

Weight-related quality of life changes 6-months following Laparoscopic Sleeve Gastrectomy or Endoscopic Sleeve Gastroplasty

Abstract

Background: Improvement in quality of life is an important patient-centred outcome of bariatric procedures.

Objectives: To report the change in weight-related quality of life 6-months after a laparoscopic sleeve gastrectomy (LSG) or endoscopic sleeve gastroplasty (ESG).

Methods: Adult patients were recruited prospectively over 12-months from Weight Loss Solutions Australia and followed from baseline to 6-months post-procedure. Quality of life was measured by the Impact of Weight on Quality of Life Assessment Tool (IWQOL-Lite) which assess overall quality of life and five sub-categories of: physical function, self-esteem, sexual life, public distress, work (or daily activities). All IWQOL scores were normalised to a scale of 0 (worst) to 100 (best) quality of life. Paired and independent t-tests were used to compare scores from baseline to follow-up and change over time between groups respectively.

Results: At baseline, LSG (mean score 42.6(11.6)) and ESG (mean score 60.0(75.5)) had “severe” impacts on QoL; where LSG participants (n=12, age 37.5(6.7) years, BMI 41.9(6.2)kg/m², 92% female) had a lower QoL compared to ESG participants (n=6, age 35.0(8.4) years, BMI 37.1 (5.7)kg/m², 83% female) (p=0.027). At follow-up, LSG had a greater improvement in QoL compared to ESG (mean change 38.8(19.8) p<0.0001 vs 15.6(21.9) p=0.142); however, this resulted in similar QoL in both groups 6-months post-procedure (p=0.131). The greater improvement in LSG compared to ESG was driven by self-esteem (mean difference 36.6 [95%CI:10.8,62.4] p=0.008) and sexual life (mean difference 45.7 [95%CI:17.8,73.5] p=0.003) domains.

Conclusion: Participants who seek the LSG and ESG in Queensland have severe weight-related impacts on their quality of life; however, LSG patients have higher BMIs and worse QoL. Both LSG and ESG participants experience improvements in QoL; however, the LSG participants experienced a greater improvement compared to ESG to achieve similar levels of weight-related QoL 6-months post-procedure.

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Presentation type
Oral

Categories
2 Outcomes from Bariatric Surgery

Conflict of interest
Yes

Conflict details
FC, GR, AS, and JJ are involved in the provision of services to the recruited participants. FC is a co-funder of the ENvISaGE Study through an Innovation Connections Grant.

Previously presented
None.
Table 1: Baseline characteristics of ESG and matched LSG patients in Queensland, Australia

<table>
<thead>
<tr>
<th>Variable</th>
<th>ESG (n=6)</th>
<th>LSG (n=12)</th>
<th>Between groups</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Baseline</td>
<td>Followup</td>
<td>Change</td>
</tr>
<tr>
<td>BMI</td>
<td>54.2 (24.1)</td>
<td>84.5 (14.0)</td>
<td>-30.3 (29) p=0.051</td>
</tr>
<tr>
<td>Weight-related physical function</td>
<td>25.8 (15.9)</td>
<td>10.3 (15.0)</td>
<td>15.5 (27.5) p=0.0001</td>
</tr>
<tr>
<td>Weight-related self-esteem</td>
<td>41.7 (28.8)</td>
<td>63.5 (25.7)</td>
<td>10.4 (12.3) p=0.093</td>
</tr>
<tr>
<td>Weight-related sexual life</td>
<td>76.0 (18.8)</td>
<td>75.5 (15.1)</td>
<td>-15.6 (24.2) p=0.093</td>
</tr>
<tr>
<td>Weight-related public distress</td>
<td>74.2 (17.4)</td>
<td>82.5 (16.0)</td>
<td>-8.3 (25.8) p=0.465</td>
</tr>
<tr>
<td>Weight-related work</td>
<td>76.0 (9.2)</td>
<td>83.3 (19.2)</td>
<td>-7.3 (24.2) p=0.493</td>
</tr>
<tr>
<td>Total weight-related quality of life</td>
<td>60.0 (18.8)</td>
<td>75.5 (15.1)</td>
<td>-15.6 (24.2) p=0.493</td>
</tr>
</tbody>
</table>

a. Data presented mean (standard deviation)
b. Data presented mean difference (95%CI)
c. Values normalized to a scale of 0 (worst quality of life) to 100 (best quality of life).