Disclosure Statement

Covidien: Consultant, Grants
How to deal with a failure from the past: VBG and mini gastric bypass

Michel M. Murr, MD, FACS
Director of Bariatric Surgery
Metabolic and Bariatric Surgery

Outline for Revisional Procedures

Rationale
Indications
Techniques
Outcomes
Metabolic and Bariatric Surgery
Indications for Revisional Surgery

- Inadequate weight loss
- Excessive weight loss
- Metabolic sequelae
- Complications
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Understand why the previous procedure failed
Set realistic expectations for patient and surgeon
Utilize endoscopic and radiographic modalities
Require pts to undergo interdisciplinary evaluation
Full assessment of nutritional deficits
Review the operative note
Know personal limitations
# Metabolic and Bariatric Surgery

## Revisional Procedures

<table>
<thead>
<tr>
<th></th>
<th>2005</th>
<th>2012</th>
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</thead>
<tbody>
<tr>
<td>Caseload</td>
<td>10%</td>
<td>20%</td>
</tr>
<tr>
<td><em>VBG</em></td>
<td>40%</td>
<td>15%</td>
</tr>
<tr>
<td><em>RYGB</em></td>
<td>40%</td>
<td>15%</td>
</tr>
<tr>
<td><em>LAGB</em></td>
<td>10%</td>
<td>60%</td>
</tr>
<tr>
<td>Others</td>
<td>10%</td>
<td>10%</td>
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</tbody>
</table>
Lap-VBG as a salvage procedure for VBG has inferior weight loss results and high revision rates

(Freedman, SOARD 2009)
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What is the procedure of choice for failed VBG?
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Diversionary operations such as the RYGB are the procedure of choice for failed restrictive procedures.
# Metabolic and Bariatric Surgery

## Revision of VBG to RYGB

<table>
<thead>
<tr>
<th>VBG-related complications</th>
<th>n (%)</th>
</tr>
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<tbody>
<tr>
<td>Staple-line disruption</td>
<td>7 (32)</td>
</tr>
<tr>
<td>Enlarged pouch</td>
<td>5 (23)</td>
</tr>
<tr>
<td>Band erosion</td>
<td>3 (14)</td>
</tr>
<tr>
<td>Band stenosis</td>
<td>3 (14)</td>
</tr>
<tr>
<td>Any Combination</td>
<td>4 (17)</td>
</tr>
</tbody>
</table>

Murr; JACS 2005
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VBG with large pouch
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VBG with staple line failure and stenotic stoma
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VBG with large pouch and reflux
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Revision of VBG to RYGB

- Band
- Vertical staple line
- Divided gastric pouch
- Excluded stomach
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Revision of VBG to RYGB

Key Technical Steps

Open or Laparoscopic?
Removal of the band?
Preserve the left gastric artery?
Resect portion of the stomach?
Insert a G-tube?
Use a drain?
Outcomes of VBG to RYGB

- Mortality: 3%
- Leaks: 10%
- DVT/PE: 6%
- Wound Infection: 20%
- EBWL: 63%

Murr; JACS 2005
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Imaging of Loop or Mini Gastric Bypass
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Indications to Revise Mini Gastric Bypass

- Nausea and vomiting
- Protein calorie malnutrition
- Symptomatic bile gastritis
- Anastomotic complications
**Metabolic and Bariatric Surgery**

**Key Technical Steps Mini GB to RYGB**

Laparoscopic approach
Downsize the pouch?
Identify and divide the afferent limb
Entero-enterostomy 100 cm distal
Close the mesenteric defect
Beware of Braun entero-enterostomy
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Unsatisfactory Weight Loss

Intact Anatomy

- VBG
- RYGB
- Distal RYGB or BPD
- Gastric Banding

RYGB

Distal RYGB or BPD

Steatorrhea

Non-Operative Treatment

Good

Revise; Induce Steatorrhea

RYGB or BPD with DS

No Steatorrhea

Great

Fair
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Unsatisfactory Weight Loss
Non-Intact Anatomy

Gastroplasty

RYGB
(Large Pouch)

Downsize Pouch

Revise to RYGB
Good

RYGB (Gastro-gastric fistula)

Divide Fistula
No Data

Diversionary Procedure

Re-stapling
No Data
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Revisional Procedures for Postoperative Complications

- GERD
  - Loop GB or VBG
  - RYGB
  - Good
  - Excellent

- Emesis
  - RYGB
  - VBG
  - Lengthen Roux Limb
  - Excellent
  - Excellent

- Protein Calorie Malnutrition
  - RYGB
  - Lengthen Common Channel
  - Good

- Anastomotic ulcer
  - Downsize Pouch
  - Good
RYGB is the procedure of choice for a failed VBG and Mini Gastric Bypass

Revisional procedures are associated with higher morbidity and mortality

Revisional procedures reduce weight and reverse comorbidities in select patients
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