Controversies in Sleeve Gastrectomy
<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>No. of studies* (no. of patients)</td>
<td>13 (821)</td>
<td>24 (1749)</td>
<td>36 (2570)</td>
</tr>
<tr>
<td>Preoperative BMI (kg/m²)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Range</td>
<td>49.1–69.0</td>
<td>37.2–54.5</td>
<td>37.2–69.0</td>
</tr>
<tr>
<td>Mean</td>
<td>60.0</td>
<td>46.6</td>
<td>51.2</td>
</tr>
<tr>
<td>Postoperative BMI (kg/m²)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Range</td>
<td>36.4–53.0</td>
<td>26.0–39.8</td>
<td>26.0–53.0</td>
</tr>
<tr>
<td>Mean</td>
<td>44.9</td>
<td>32.2</td>
<td>37.1</td>
</tr>
<tr>
<td>Follow-up (mo)</td>
<td>4–60</td>
<td>3–36</td>
<td>3–60</td>
</tr>
<tr>
<td>Excess weight loss (%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Range</td>
<td>33.0–61.4</td>
<td>36.0–85.0</td>
<td>33.0–85.0</td>
</tr>
<tr>
<td>Mean</td>
<td>46.6</td>
<td>60.7</td>
<td>55.4</td>
</tr>
<tr>
<td>Complication rate (%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Range</td>
<td>0–23.8</td>
<td>0–21.7</td>
<td>0–23.8</td>
</tr>
<tr>
<td>Mean</td>
<td>9.4</td>
<td>6.2</td>
<td>6.2</td>
</tr>
<tr>
<td>Studies with &gt;100 patients (%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3.3–15.3</td>
<td>0–14.1</td>
<td>0–14.1</td>
</tr>
<tr>
<td>Leaks†</td>
<td>8/686 (1.2)</td>
<td>45/1681 (2.7)‡</td>
<td>53/2367 (2.2)</td>
</tr>
<tr>
<td>Bleeding‡</td>
<td>11/686 (1.6)</td>
<td>7/1681 (0.5)§</td>
<td>28/2367 (1.2)</td>
</tr>
<tr>
<td>Strictures†</td>
<td>6/686 (0.9)</td>
<td>9/1681 (0.5)§</td>
<td>15/2367 (0.6)</td>
</tr>
<tr>
<td>Mortality‡‡</td>
<td>2/821 (0.24)</td>
<td>3/1749 (0.17)§</td>
<td>5/2570 (0.19)</td>
</tr>
</tbody>
</table>

BMI = body mass index.

Adapted, with permission, from Brethauer et al. [2].

* One study included clearly defined patients in both groups.
† Include studies with detailed complication data only.
‡ P = .02 compared with high-risk group.
§ P not significant compared with high-risk group.
¶ Thirty-day postoperative mortality.
Technical Pearls

• Sleeve Gastrectomy is a difficult operation?

• High Risk Group/Low complication rate quandary
Technical Pearls

- Thicker staple load cartridges in antrum (green load)
- Avoid narrowing at angularis at all cost
Technical Pearls

• Beware of the esophagus
• Oversew staple line... junctions? Flap?
• Beware of the “Cork Screw” Effect
• Don’t Hug the Bougie
  – Always think salvage
Does Size Matter?

Laparoscopic Sleeve Gastrectomy – Influence of Sleeve Size and Resected Gastric Volume

Rudolf A. Weiner, MD, PhD¹; Sylvia Weiner, MD¹; Ingmar Pomhoff, MD¹; Christoph Jacobi, MD, PhD²; Wojciech Makarewicz, MD³; Gerhard Weigand, MD¹

¹Center for Minimal-Invasive Surgery, Department of General and Bariatric Surgery, Krankenhaus Sachsenhausen, Frankfurt/M., Germany; ²Department of Surgery (Charite`), Humboldt-University Berlin, Germany; ³Department of General, Endocrine and Transplant Surgery, Medical University of Gdansk, Poland
Does Size Matter?

- N=120
- 3 groups (no bougie, 44 fr, and 32 fr)
- Mortality rate - 0.8%
- Leak Rate 1.7%
- Early weight loss similar in all groups
- Late weight loss improved with lower bougie size
- Resected Volume <500cc poor outcome
• Re-Sleeve vs Stage 2
  – Re-Sleeve may be better option for
    • Continued Nsaid use
    • Chron’s Disease
    • Multiple bowel Resections
    • Severe anemia or osteoporosis
Hiatal Hernia

Symposium review

The Second International Consensus Summit for Sleeve Gastrectomy, March 19–21, 2009

Michel Gagner, M.D., F.R.C.S.C., F.A.C.S.\textsuperscript{a,*}, Mervyn Deitel, M.D., C.R.C.S.C., F.A.C.N., F.I.C.S.\textsuperscript{b}, Traci L. Kalberer, B.A.\textsuperscript{c}, Ann L. Erickson, B.A.\textsuperscript{c}, Ross D. Crosby, Ph.D.\textsuperscript{d}

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\textsuperscript{d}Director of Biomedical Statistics, Neuropsychiatric Research Institute, Fargo, North Dakota
Hiatal Hernia

- GERD may be a contraindication to Sleeve
  - Symptomatic GERD present in 35 of 119 patients
  - 17 required PPI preop
  - 13 of 17 required post op PPI
  - 12 reported worsening GERD

- Conclusion
  - RYGB may have been better for these patients
  - Conversion to RYGB preferable over DS

Surgery for Obesity and Related Diseases 6 (2010) 434–436

Video case report

Sleeve gastrectomy strictures: technique for robotic-assisted strictureplasty

Ranjan Sudan, M.D. a,*, George Kasotakis, M.D. b, Allison Betof, B.A. a, Alene Wright, M.D. c

aDepartment of Surgery, Duke University Medical Center, Durham, North Carolina
bDepartment of Surgery, Creighton University Medical Center, Omaha, Nebraska
cDiagnostic Clinic, Largo, Florida

Received May 12, 2010; accepted May 12, 2010
Treatment of Gastric Leaks with Coated Self-Expanding Stents after Sleeve Gastrectomy

Carlos Serra, MD, PhD; Aniceto Baltasar, MD; Luis Andreo, MD; Nieves Pérez, MD; Rafael Bou, MD; Marcelo Bengochea, MD; Juan José Chisbert

General Surgery Service and 1Interventional Radiology, Virgen de los Lirios Hospital, Alcoy, Alicante, Spain
For Distal Sleeve Leaks
- May be more “corrosive” due to bile
Case Report

Use of a Roux Limb to Correct Esophagogastric Junction Fistulas after Sleeve Gastrectomy

Aniceto Baltasar, Rafael Bou, Marcelo Bengochea, Carlos Serra, Luis Cipagauta

The Surgical Service, “Virgen de los Lirios” Hospital, Alcoy, Alicante, Spain
Diagnosis and Management of Gastric Leaks After Laparoscopic Sleeve Gastrectomy for Morbid Obesity

Jeremy T. Tan • Sanjeeva Kariyawasam • Thejana Wijeratne • Harsha S. Chandraratna