

Surgical Advances in Obesity Medicine

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Disclosures:

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Surgical Advances in Obesity Medicine

“Patients who are naturally very fat are apt to die earlier than those who are slender”

Hippocrates, 460-377 BC

"Evolution"

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Classification of Obesity

Overweight	25-29.9 kg/m ²
Obese	30-34.9 kg/m ²
Severe Obesity	35-39.9 kg/m²
Morbid Obesity	40-49.9 kg/m²
Super Obesity	50-59.9 kg/m²
Super-Super Obesity	60+ kg/m²

Indications for Surgical Treatment

At least 5 year history of severe obesity

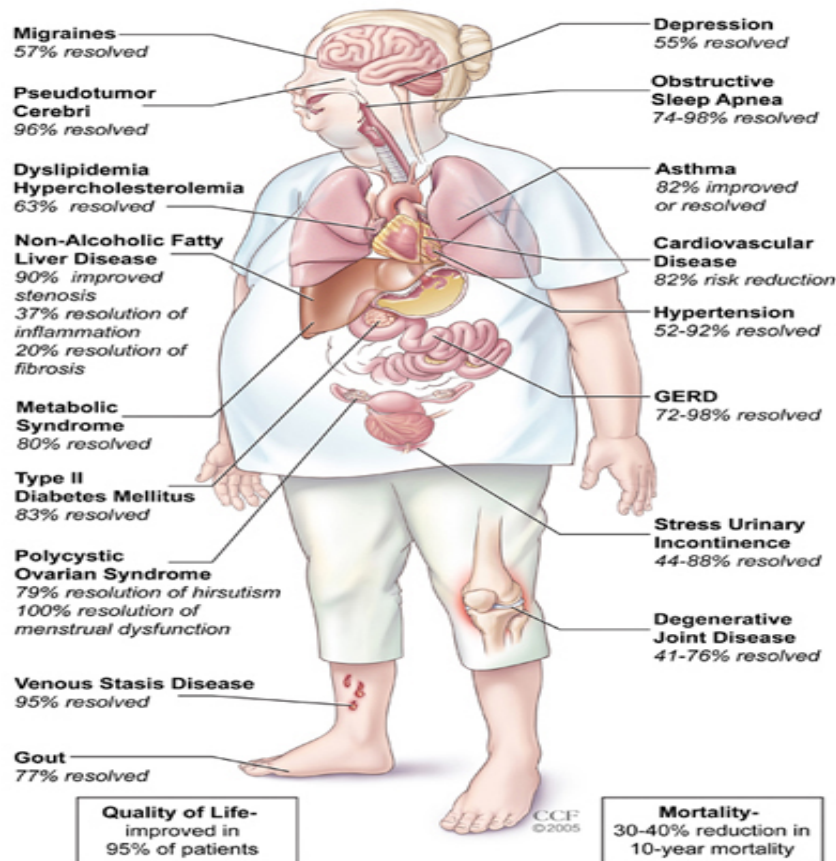
Multiple failed attempts at nonsurgical means of weight loss

BMI >40 kg/m² or BMI >35 kg/m² with associated with significant obesity-related comorbidities

1991 NIH Consensus Development Conference

Medical Problems Resolved After Bariatric Surgery

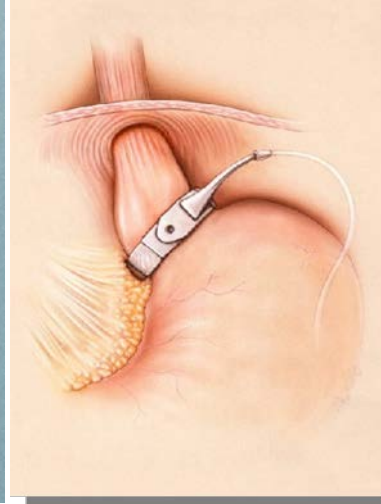
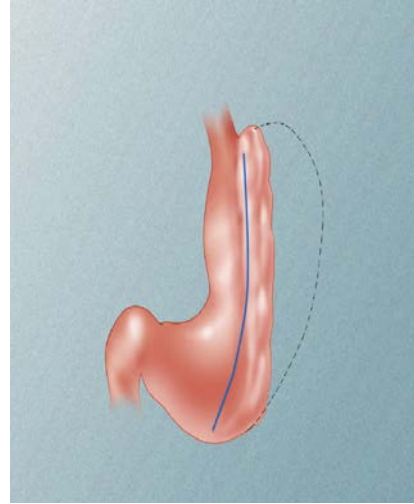
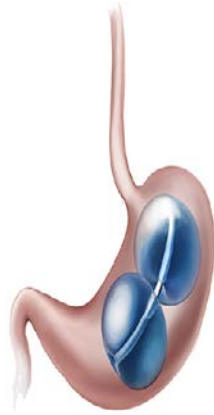
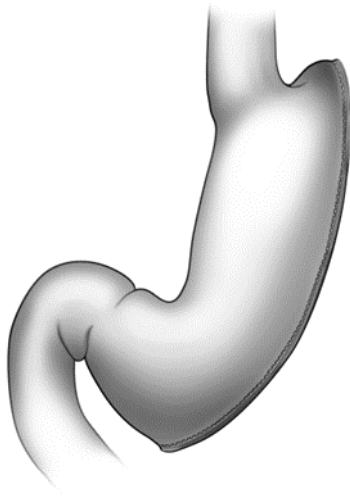
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Preoperative Assessment & Preparation

- Nutritionist
- Nurse practitioner or Social worker
- Psychiatrist
- Internist/Cardiologist
- Surgeon/gastroenterologist
- Anesthesiologist
- Operative risks/benefits
- Nutritional sequelae
- Need for long-term follow-up
- Assess for obesity-related comorbidities
- Change in lifestyle
- Post-operative changes
- Preoperative liquid diet

Surgical Options



Roux En Y Gastric Bypass

- Advantages
 - Best early weight loss (~ 75% EBWL @ 1 year)
 - Long track record/safety
 - Excellent T2DM control
 - Dumping
- Disadvantages
 - Longer operative time
 - Internal Hernias
 - - Marginal Ulcers
 - Stoma enlargement
 - Dumping

Sleeve Gastrectomy

- Advantages
 - Shorter op time
 - Relative ease
 - No prosthesis
 - No adjustments
 - No ulcers
 - Better wt loss than band (~65% EBWL @ 1 year)
- Disadvantages
 - Lower weight loss than bypass
 - Irreversible
 - Slightly greater complications
 - Staple line
 - Unclear complications
ie GERD, nausea

Intragastric Balloons

- Advantages
 - Fast, easy
 - Lower BMI threshold
 - May be endoscopically placed
- Disadvantages
 - Must be removed @ 6 months
 - Lower wt loss than others (~ 12% EBWL @ 6 months)
 - Significant nausea
 - Only BMI \leq 40
 - No insurance coverage
 - ? safety

Endoscopic Gastric Plication

- Advantages
 - Safe
 - Attractive to least committed
- Disadvantages
 - Technically challenging
 - No insurance coverage
 - Lacks metabolic effects
 - Lower wt loss than others
 - May make future conversions more difficult
 - Little outcome data

Adjustable Gastric Band

- Advantages
 - Shorter operative time
 - Relative ease to perform
 - Stoma size can be adjusted
 - Easily reversible
- Disadvantages
 - Lower weight loss
 - Esophageal dilation
 - Slippage
 - Erosion

Roux Complications--Bleeding

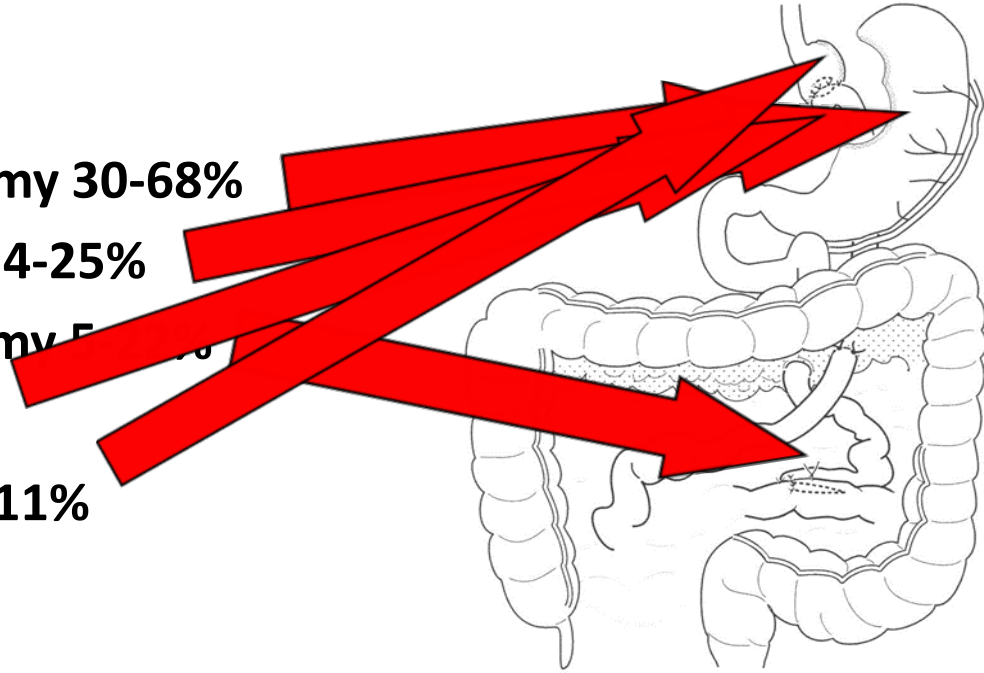
- **Sources:**
 - Gastrojejunostomy
 - Jejunojejunostomy
 - Gastric remnant
 - Intra-peritoneal



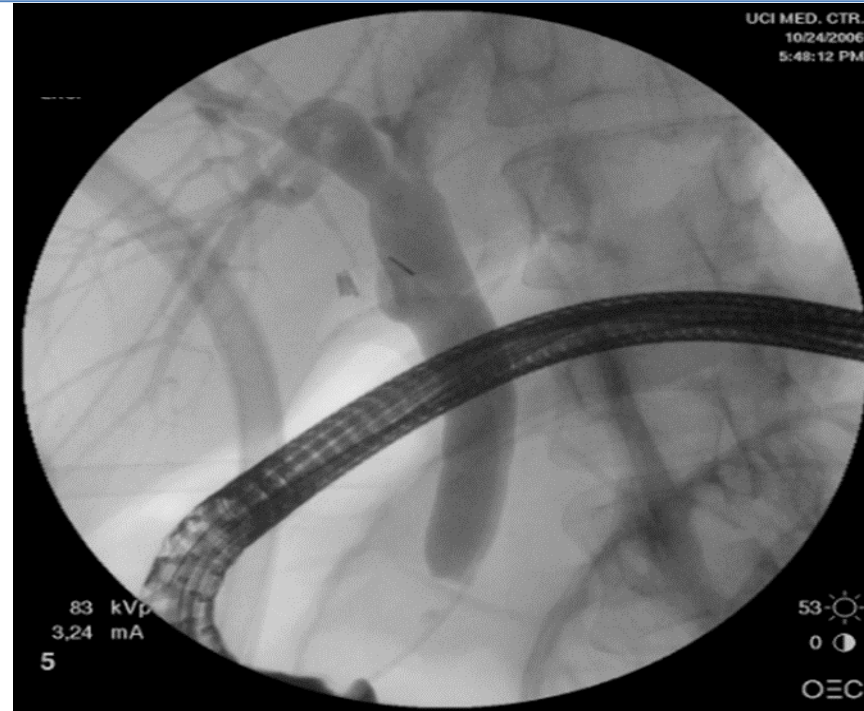
Roux Complications--Leak

- **Sites**

- Gastrojejunostomy 30-68%
- Gastric remnant 4-25%
- Jejunojejunostomy 5-11%
- Candy cane 11%
- Gastric pouch 9-11%

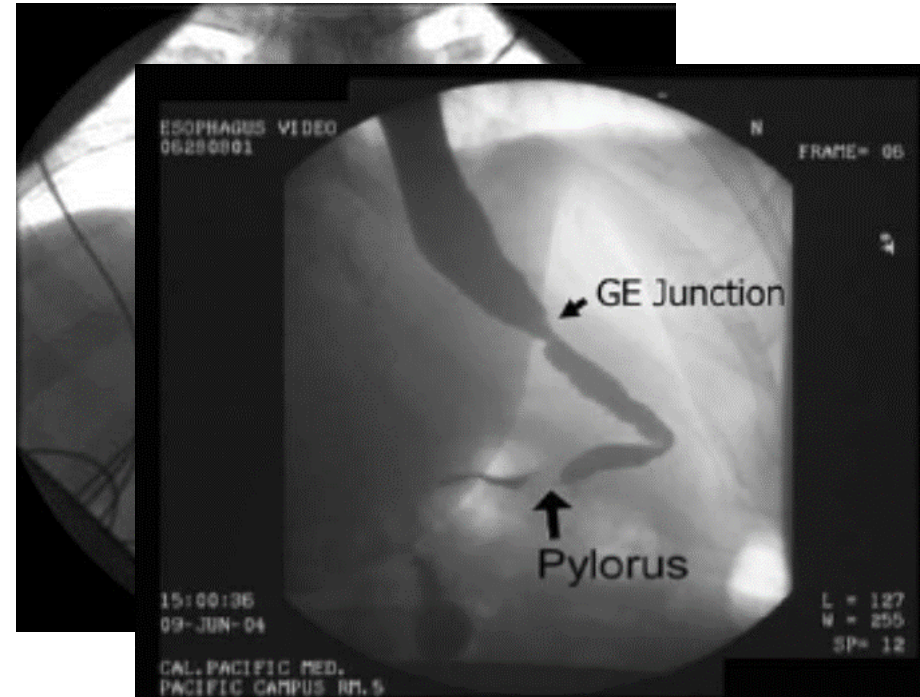


Roux Complications: Choledocolithiasis



Sleeve Complications: Leak

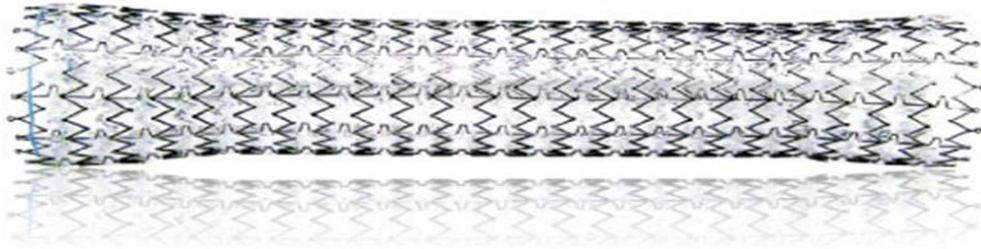
- Narrowing at Incisura
 - Partial distal obstruction
 - High pressure proximally
- Staple onto esophagus



Sleeve Complications: Leak

- Drainage
- Primary closure of defect vs. covering of defect
- IV antibiotic
- NPO
- Enteral/parenteral feeding
- And...

Sleeve Complications: Leak



FDA indicated for management of malignant obstruction or obstruction in a setting of fistula

NOT FDA approved indication for leaks or in benign indications



When to Call Your Bariatric Surgeon

- **New onset abdominal pain**
- **Temperature greater than 100.5 °C**
- **Increasing redness/drainage of wound**
- **New respiratory distress**
- **Persistent vomiting**
- **Anything that looks like a PE**
- **TACHYCARDIA!!!**



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UCI Health

Thank You

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