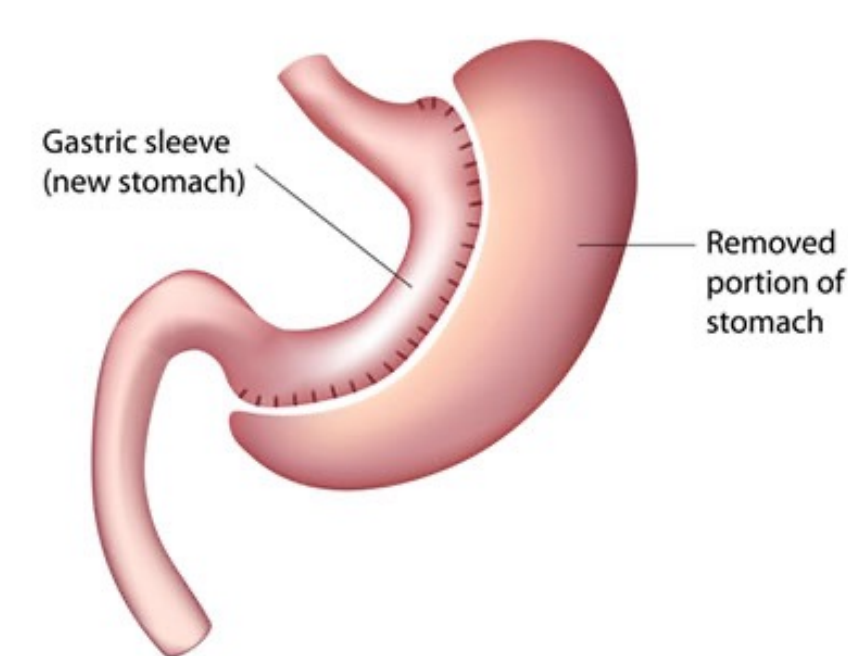


## Introduction and Descriptions of Bariatric Surgeries

- Obesity (BMI > 30 kg/m<sup>2</sup>) is associated with an increased risk of developing chronic diseases, including
  - Type 2 diabetes, hypertension, and hyperlipidemia
- Obesity prevalence in American adults aged 20+ in 2015-16 was 39.8%
- Bariatric procedures can be classified as restrictive, malabsorptive, or both
  - Restrictive procedures**
    - Cause weight loss via a reduction in the amount of food ingested
    - Typically involve excision of part of the stomach
  - Malabsorptive procedures**
    - Result in weight loss by decreasing the amount of nutrients absorbed from the gastrointestinal tract
- Common procedures in the USA
  - Laparoscopic sleeve gastrectomy
    - A restrictive procedure
    - Involves excision of the greater curvature of the stomach
    - Produces early satiety and weight loss from decreased caloric intake

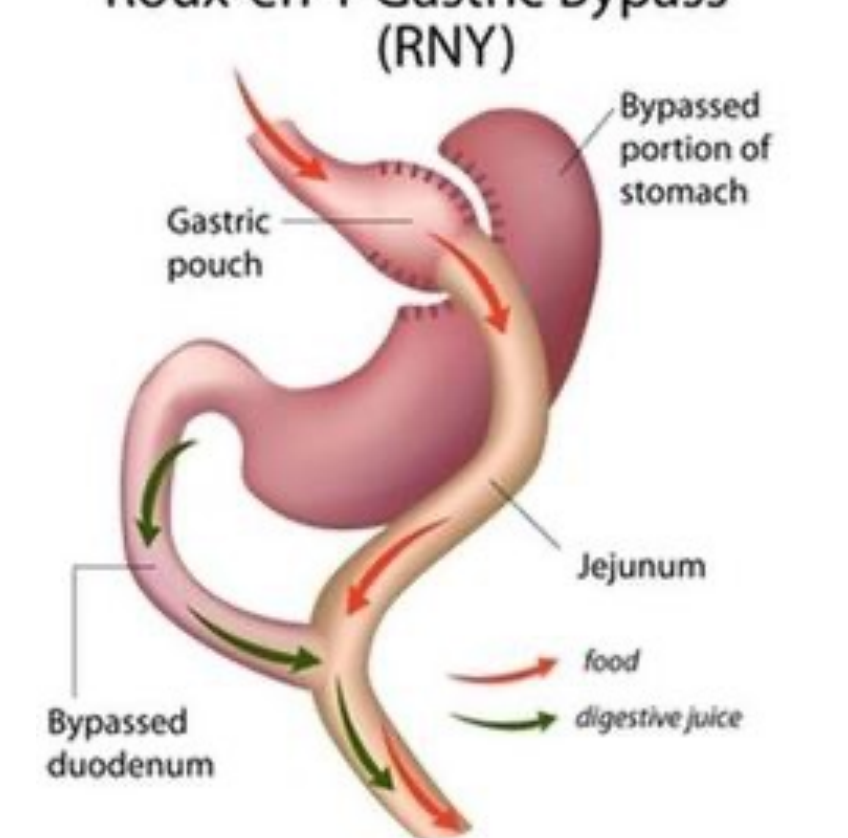
Vertical Sleeve Gastrectomy



### 2. Roux-en-Y gastric bypass

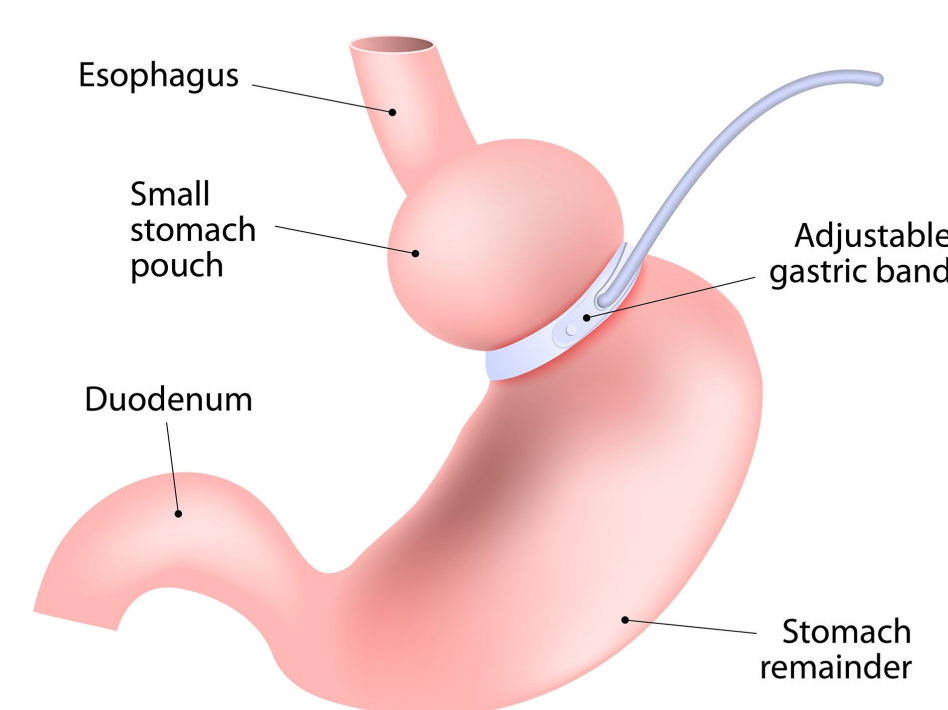
- A combined restrictive and malabsorptive procedure
- Attaches the proximal jejunum to a gastric pouch and bypasses the biliopancreatic limb
- Causes weight loss by decreased caloric intake, decreased digestion in the stomach, and decreased absorption in the small bowel

Roux-en-Y Gastric Bypass (RNY)



### 3. Laparoscopic adjustable gastric banding

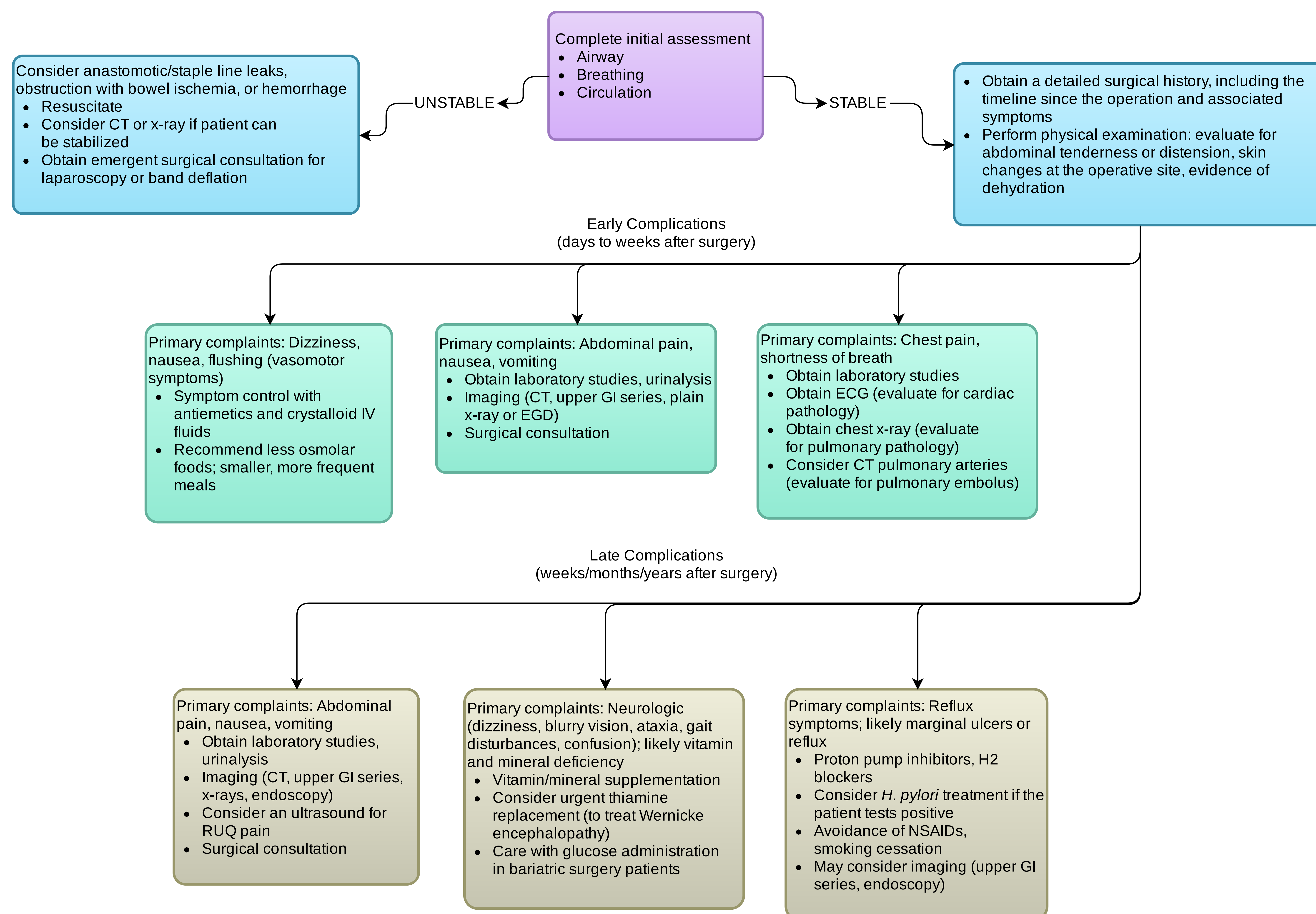
- A restrictive procedure
- A plastic band is placed around the fundus of the stomach, creating a small pouch
- Inflating or deflating the band as needed causes early satiety and decreased oral intake



## Common Complications of Bariatric Procedures

Procedure	Early Postoperative Complications	Late Postoperative Complications
Laparoscopic sleeve gastrectomy	<ul style="list-style-type: none"> <li>Staple-line leaks</li> <li>Strictures</li> <li>Hemorrhages</li> </ul>	<ul style="list-style-type: none"> <li>Reflux</li> <li>Strictures</li> </ul>
Roux-en-Y gastric bypass	<ul style="list-style-type: none"> <li>Esophageal/gastric perforation</li> <li>Tight gastric band</li> <li>Early band slippage/prolapse</li> </ul>	<ul style="list-style-type: none"> <li>Port-site infections</li> <li>Connector tubing dislodgements/rupture</li> <li>Late band slippage/prolapse</li> <li>Band erosion with intragastric migration</li> </ul>
Laparoscopic adjustable gastric banding	<ul style="list-style-type: none"> <li>Anastomotic leaks</li> <li>Strictures leading to bowel obstruction</li> <li>Hemorrhages</li> <li>Dumping syndrome</li> </ul>	<ul style="list-style-type: none"> <li>Marginal ulcers</li> <li>Internal hernias +/- bowel obstruction</li> <li>Intussusception +/- bowel obstruction</li> <li>Strictures</li> <li>Trocar site/ventral hernias</li> <li>Cholelithiasis</li> <li>Nutritional deficiencies</li> </ul>

## Clinical Pathway for Emergency Department Management of Patients with Bariatric Surgery Complications



## Citations

- Ogunniyi A. Emergency department management of patients with complications of bariatric surgery. Emerg Med Pract. 2019;21(7):1-28.
- [https://www.uptodate.com/contents/outcomes-of-bariatric-surgery?search=bariatric%20surgery%20emergency%20medicine&source=search\\_result&selectedTitle=4-150&usage\\_type=default&display\\_rank=4](https://www.uptodate.com/contents/outcomes-of-bariatric-surgery?search=bariatric%20surgery%20emergency%20medicine&source=search_result&selectedTitle=4-150&usage_type=default&display_rank=4)
- [https://www.uptodate.com/contents/bariatric-surgery-postoperative-and-long-term-management-of-the-uncomplicated-patient?search=bariatric%20surgery%20emergency%20medicine&source=search\\_result&selectedTitle=6-150&usage\\_type=default&display\\_rank=6](https://www.uptodate.com/contents/bariatric-surgery-postoperative-and-long-term-management-of-the-uncomplicated-patient?search=bariatric%20surgery%20emergency%20medicine&source=search_result&selectedTitle=6-150&usage_type=default&display_rank=6)
- [https://www.uptodate.com/contents/late-complications-of-bariatric-surgical-operations?search=bariatric%20surgery%20postoperative&source=search\\_result&selectedTitle=3-150&usage\\_type=default&display\\_rank=3](https://www.uptodate.com/contents/late-complications-of-bariatric-surgical-operations?search=bariatric%20surgery%20postoperative&source=search_result&selectedTitle=3-150&usage_type=default&display_rank=3)
- <https://www.obesitycoverage.com/wp-content/uploads/2018/03/gastric-sleeve-diagram.jpg>
- <https://www.muhealth.org/sites/default/files/inline-images/Gastric-Band-compressor.jpg>
- <https://epos.mysyr.org/posterimage/esr/ecr2015/129544/media/605465?maxheight=300&maxwidth=300>