# Common Complications of Bariatric Surgery

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## Faculty/Presenter Disclosure

- Faculty: Daniel W Birch
- Relationships with commercial interests:
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# **Bariatric Surgery**

Major abdominal / gastrointestinal surgery with all inherent predictable complications

Volume (program) will influence overall risk/outcomes

Thoughtful approach to patient - considering all management options in a multidisciplinary process will lead to appropriate outcomes and risks

Unexpected/unpredictable outcomes may still occur







#### Anesthesia

Complications of general anesthetic, intubation, intravenous lines are uncommon

Complications related to patient positioning, moving and transport uncommon

All appropriate human resources (team) equipment essential for safe positioning and patient transport







## **Wound Complications**

Minimally invasive surgery dominates the approach to surgical management

Complications related to access/trocars/instruments uncommon

Wound infections/hernias/pain/functional limitations dramatically reduced in MIS approach







## Intra-operative complications

During surgery complications of hollow/solid organ injury, incorrect anatomy uncommon

Appropriate pre-operative patient preparation, medical optimization and weight loss (nutritional lifestyle, meal replacement strategies, pharmacologic) will reduce risks of major organ / vascular injury

Experience of surgical team is critical to success





## Early Post-operative Complications

MBSAQIP database:

2015/16: 243,747 patients RYGB or LSG

Primary bariatric surgery

Rates of reoperation or reintervention low at 1.2% (includes upper endoscopy)

Ladak et al: Rates of Reoperation and Reintervention Within 30 Days of Bariatric Surgery. In submission.





of Minimally Invasive Surgery			
Table 3: Complications following bariatric surgery			
COMPLICATIONS	All (n,%) (n=243,747)	RYGB (n=69,411)	LSG (n=174,336)
MAJOR COMPLICATIONS	5,219 (2.14%)	2,399 (3.46%)	2,820 (1.62)
ANY CARDIAC EVENT (MI, CPR, CARDIAC ARREST)	173 (0.07%)	72 (0.1%)	101 (0.06)
PNEUMONIA	508 (0.21%)	285 (0.41%)	233 (0.13%)
ACUTE RENAL FAILURE	357 (0.15)	160 (0.23%)	197 (0.11%)
DVT	648 (0.27%)	207 (0.30%)	441 (0.25%)
SSI DEEP	623 (0.26%)	329 (0.47%)	294 (0.17%)
SSI SUPERFICIAL	1,076 (0.44%)	670 (0.97%)	406 (0.23%)
SEPSIS	263 (0.11%)	132 (0.19%)	131 (0.08%)
UNPLANNED INTUBATION	393 (0.16%)	195 (0.28%)	197 (0.11%)
WOUND DISRUPTION	100 (0.04%)	49 (0.07%)	51 (0.03%)
ANAST/STAPLE LINE LEAK	1,079 (0.44%)	403 (0.58%)	676 (0.39%)
SIGNIFICANT BLEED	2,294 (0.94%)	1,187 (1.71%)	1,107 (0.63%)
COMA	8 (0.00%)	1 (0.00%)	7 (0.00%)
CVA	23 (0.01%)	3 (0.00%)	20 (0.01%)
DEATH	239 (0.10%)	108 (0.16%)	131 (0.08%)



#### **LAGB**

Failure to meet weight loss expectations

Reflux/regurgitation +/- esophageal dilation, dysmotility

Slip distally on stomach

Port site pain, port rotation

Band/tubing erosion

\*influence of band adjustment process







LSG

Reflux syndrome (acid/non-acid)

Failure to meet weight loss expectations

Sleeve stenosis/angulation





**RYGB** 

Marginal ulcer

Internal Hernia/SBO

**Dumping** 

Nutritional deficiencies (protein, vitamin)



