

# CO-OCCURRING EATING AND SUBSTANCE USE DISORDERS IN THOSE WITH A HISTORY OF BARIATRIC SURGERY

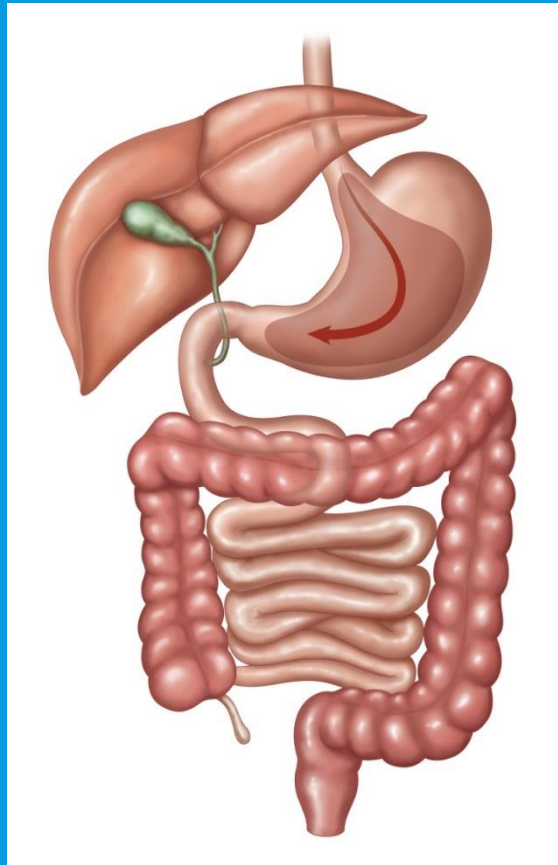
Andrea Zuellig, Ph.D., L.P.

Binge Eating Disorder Program Lead

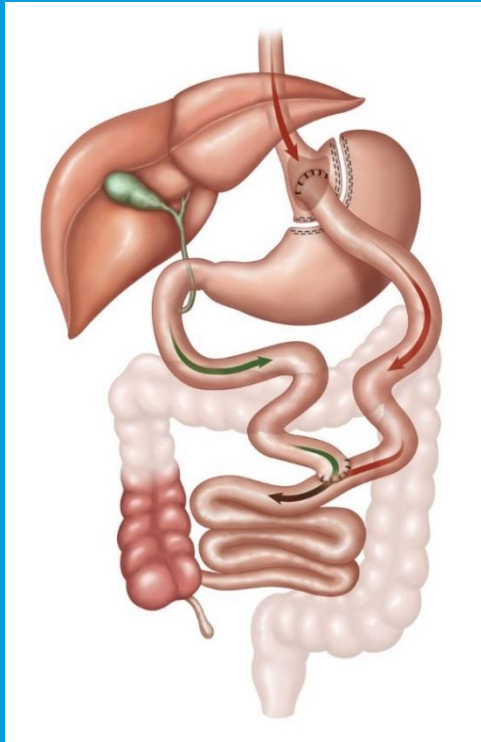


- Physiology of Bariatric Surgery
- Pre-surgery Substance and Eating Disorders
- Development of Substance and Eating Disorders Post-surgery
- Case Studies

# DIGESTIVE SYSTEM



# ROUX EN Y/ GASTRIC BYPASS



- Small stomach pouch is created to restrict food intake.
- Small intestine is attached to the pouch to allow food to bypass the lower stomach.
- Reduces amount of calories/nutrients body absorbs.
- 25-35% initial body weight lost within 12-18 months (Sarwer, et al., 2011).

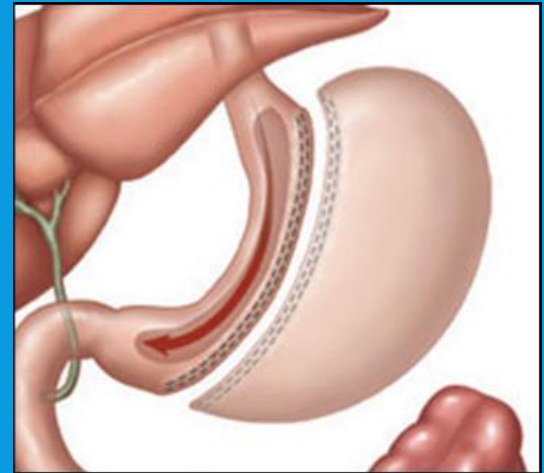
# ADJUSTABLE GASTRIC BANDING

- A silicone band is placed around the upper part of the stomach:
  - A small pouch is created
  - Pouch holds less food
  - Feel full faster and longer when band is optimally adjusted
  - 20-25% of initial body weight loss within 12-18 months (Sarwer, et al., 2011)



# VERTICAL SLEEVE GASTRECTOMY

- Restrictive only procedure
- Gastric reduction procedure
- Small sleeve or stomach
- Lower stomach is removed
- Mean excess weight loss at 1 yr of 59% (Lee, et al., 2007)
- No implanted medical device



# DUODENAL SWITCH



- Lower stomach removed
- Middle section of intestines attached to duodenum and separated section of intestines reattached to end of intestine
  - reduces the amount of calories and fat that can be absorbed.
  - Patients absorb 20% of fat that they consume
  - 75 to 100% excess weight lost

# PSYCHOLOGICAL ASSESSMENT OF BARIATRIC SURGERY CANDIDATES

- Clinical Interview
- Collateral Information (substance use history, legal history, eating behavior)
- Use of Psychological Testing (MMPI-2, MBMD; QOL)
- Some programs may use substance abuse specific measure (AUDIT)
- Request of Previous Records or Candidacy Letters



# PSYCHOLOGICAL ASSESSMENT

1. Assess a broad range of substances
2. Assess for eating disorders and eating behaviors
3. Assess range of addictive behavior
4. Assess links between substance use and coping style, proneness to addiction, compulsiveness, impulsivity, self-medication, judgement, and self-management

# PRE-SURGERY COMORBID CONDITIONS

- 46-58% with “Axis I” Disorders (Sockalingam, et al., 2013)
- Anxiety (9%-14%)
- ADHD (10%) (Alfonsson, Parling & Ghaderi, 2012)
- Mood Disorder (34%)
- Binge Eating (10-50%)
- Substance Abuse (1% to 8%)
  - Lifetime hx of any substance abuse disorder is greater in bariatric surgery candidates (15.1%-35.3% ) then in general population (14.6%-30.3%)
  - 5% completing CD treatment pre-operatively

# WHY IS THIS AN ISSUE?

- Well documented that patients who abuse alcohol before surgery are much more likely to be diagnosed with Alcohol Use Disorder after surgery (Li, et al, 2016).
- Patients who have never had substance abuse issues may have them afterward.
- Obesity is not an eating disorder.
- Patients who have eating disorder history more prone to relapse.
- Patients who have never had an eating disorder may have eating disorder issues afterward.

# “ADDICTION TRANSFER”

- Bariatric surgery does not solve emotion regulation difficulties.
- Emotional eating, avoiding emotions through food.
- Without coping skills, may transfer to other behaviors (e.g., shopping, gambling, drinking, sex).
- Increased energy, impulsivity after surgery.
- Increased sociability, confidence, attention.
- “Second chance” at missed opportunities in adolescence.

# “ADDICTION TRANSFER”

- Increased sensitivity to alcohol intoxication (Heinberg, Ashton, & Coughlin, 2012), and potentially increased risk for DUIs.
- Risk may increase after first post-operative year (King, et al., 2012).
- Gastric bypass may be at up to double risk of alcohol dependence compared to band (Ostlund et al., 2013).

# BARIATRIC SURGERY PATIENTS WITH HISTORY OF SUBSTANCE ABUSE

- ASMBS identifies current alcohol or substance abuse/dependence as contradiction for weight loss.
- ASMBS holds criteria of 1 year of abstaining from alcohol or drug use preoperatively following hx of substance abuse.
- Bariatric Team may require period of abstaining prior to surgery and regular follow-up with mental health provider throughout surgery process.
- Some programs have patient sign a contract related to abstaining from alcohol use for first year and include informed consent related to knowledge of addiction transfer risk.

# RISK FACTORS FOR POSTOPERATIVE SUBSTANCE ABUSE

- Regular or problematic alcohol or drug use preoperatively
- Smoker
- Male gender
- Younger age
- ADHD diagnosis
- Preoperative issues with impulsive behavior
- Roux-en-Y Gastric Bypass
- Family History
- Untreated trauma/current PTSD diagnosis (particularly sexual trauma)

# SUBSTANCE ABUSE POST-SURGERY

- 1/5 of patients develop alcohol use disorder within 5 years post RYGB (King et al, 2017).
- 34%-90% report NEW use of substances regularly after surgery.
- Patients undergoing RYGB twice as likely as those undergoing LAGB to develop alcohol use disorder (Steffen et al, 2015).
- Neurobiological animal studies show increased reward stimulation from alcohol ingestion after RYGB.
- Rapid, increased peak alcohol concentration after RYGB (Steffen et al, 2015)- shorter time to get very intoxicated.
- Not eating a lot....





Super Fast + Super Concentrated  
+ Super Long Lasting =  
SUPER DRUNK



# EATING DISORDERS PRE-SURGERY

- Bulimia Nervosa or Binge Eating Disorders vs. Anorexia Nervosa (Conceicao, 2013).
- Previously untreated and undiagnosed history of an eating disorder.
- Long standing eating disorder behaviors masked by failed weight loss.
- Dishonesty about eating disordered thoughts and behaviors.
- Patient may think that eating disordered thoughts will be alleviated by weight loss surgery.

# BINGE EATING DISORDER

- Binge Eating (10-50%) in bariatric surgery candidates.
- In terms of the bariatric patient, binge is associated with eating larger portion than expected, until **uncomfortably full with lack of control**.
- Difference between “physiological bingeing” and true bingeing.
- “Loss of control” eating is related to less weight loss, weight regain, and higher BMI post RYGB or Sleeve (Conceicao et al, 2014; Ivezaj et al, 2016).

# EATING DISORDERS POST-SURGERY

- These patients are older at age of onset than typical cases of eating disorders.
- Postoperatively, patients may state they withheld symptoms from examiner during pre-operative assessment.
- Nutrient deficits, specialized diets, and medical complications mimic eating disorder behavior.
- r/o mechanical reason.

# EATING DISORDERS POST-SURGERY

- 25% reported subjective bingeing post surgery (deZwaan et al., 2010 ).
- 12% report vomiting to control weight or shape postoperatively (Conceicao et al., 2013; deZwaan et al., 2010 ).
- Drinking fluids during meals to flush out stomach pouch and allow bingeing.
- Eating high fat “dumping foods” (roux-en-y only) to purge via diarrhea or vomiting.

# ATYPICAL ANOREXIA

- “Anorexic tendencies” may be present pre-operatively (Scioscia et al., 1999).
- Postoperatively, criteria for Anorexia can be met with exception of BMI (Conceicao et al., 2013).
- DSM-5 has helped broaden BMI range to classify bariatric patient with eating disorder (Other Specified Eating Disorder, Atypical Anorexia).
- Chew-spitting -a way to eat without struggling with digestion/weight gain (Obesity Help, accessed 3/13/14).
- Behaviors that are recommended by bariatric team, but become compulsive (exercising, weighing, monitoring/measuring, food intake, chewing).

# PREOPERATIVE PREVENTION GROUPS (ASHTON ET AL., 2012)

- Identify how alcohol impacts health
- Education on how alcohol impacts patient's postoperatively
- Impact on Eating Behaviors
- Other Addictions addressed
- Stress Management
- Warning Signs of Addiction and Resources

# SIGNS “MY PATIENT” IS STRUGGLING POSTOPERATIVELY:

- Wears baggy clothes
- Grief over lost of obese body
- Frequently criticizes weight
- Has trouble acknowledging magnitude of weight loss
- Underweight following bariatric surgery
- Avoids intimacy/relationship concerns
- Preoccupation with food
- “Buyers Remorse”



# SIGNS “MY PATIENT” IS STRUGGLING POSTOPERATIVELY:

- Dumping syndrome or vomiting has increased
- Weight regain has occurred
- Alcohol use or other addictive behaviors have increased
- Mood has worsened/ Suicide thoughts
- Continued eating, although self-induced vomiting is needed to relieve discomfort. (Saunders, 2001)

# SIGNS “MY PATIENT” IS STRUGGLING POSTOPERATIVELY:

- Failure to keep post-operative appointments
- Eats food that is not postoperative compliant because it does not cause illness
- Reports snacking more and eating between meals
- “Grazing” more often (Letite Faria, et al., 2009)
- Binge Eating or self-reported loss of control when eating (Kalarchian, et al., 2002)

# CASE STUDY 1

- 32 year old Female, post Roux en Y
- History of Depression
- Relationship Struggles
- Alcohol Use Daily, 4 glasses of wine
- Binge ate when drinking
- Presented initially for weight regain, did not view alcohol as a problem or identify with addiction transfer

# CASE STUDY 2

- 55 year old Female, post Roux en Y
- Recurrent Major Depression
- Lost over 150 lbs
- Marital Struggles
- Presented for depression, excessive weight loss, malnutrition