Orientation Class Slides

Northern Light Health

Northern Light Surgical Weight Loss

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Highest Level of Accreditation Since 2005

MBSAQIP® ACCREDITED CENTER QUALITY PROGRAM
AMERICAN COLLEGE OF SURGEONS
AMERICAN SOCIETY FOR METABOLIC AND BARIATRIC SURGERY

Medical Director: **Michelle Toder, MD, FACS**

- Board Certified
- Fellow, American College of Surgeons
- ASMBS member
- Weight loss surgery since 1997
- Performs bypass, band, sleeve gastrectomy and revisions of prior weight loss surgeries
- Pioneer in performing and teaching robotic weight loss surgery to surgeons from all over the world

Our Multidisciplinary Team

1. You
2. Family / Support
3. PCP
4. Surgeon
5. Nursing
6. Dietitian
7. Psychologist
8. Physical Therapist
9. Program Coordinator

We may also schedule pulmonologist (sleep study) and other sub-specialties such as cardiology, hematology, etc. as needed.

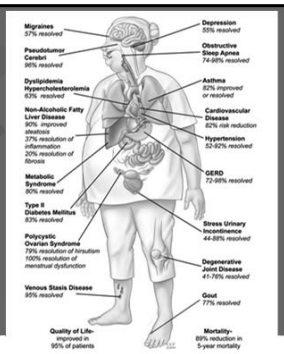
Definition of Obesity

Body Mass Index (BMI)

Weight / (Height) ^{2} = kg/m^2

Healthy	18.5 – 24.9
Overweight	25 – 29.9
Obese Type I	30 – 34.9
Surgery Eligible:	
Obese Type II	35 – 39.9
Morbidly Obese	≥ 40
Super Morbidly Obese	≥ 50

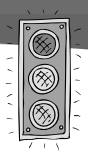
To determine your BMI, visit our website:
northernlighthealth.org/Services/Surgery/Surgical-Weight-Loss



Medical Indications for Surgery

- BMI >40 (may be insurance specific)
- BMI >35 with significant health issue
- Failed attempts at weight loss
- Adequate comprehension and support
- No unstable heart disease or severe lung disease
- No active substance use including tobacco, marijuana (salves, tinctures or joints)
- No poorly controlled psychological disorder
- Ages 18-65
- Willingness for long-term follow-up

Who May Not Be Eligible?



- Use of tobacco or marijuana products
- Those on methadone
- Recent history of drug or alcohol abuse
- Recent history of purging/vomiting behavior
- Poor/no dentition (teeth)
- History of noncompliance with medical treatments/appointments
- Those with excessive medical risks

Weight Loss Options

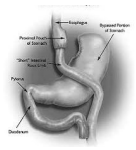
- Diet
- Diet and Exercise
- Prescription weight loss medications
- Balloon—not covered by insurance or offered at Northern Light EMMC
- Surgery*

*In 1991 the NIH endorsed surgery as the best long-term solution to combat morbid obesity. This position statement remains true today.

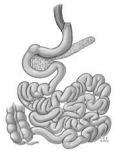
Success Through Weight Loss Surgery

- Keep an open mind to surgical options-to be decided between you and your surgeon
- Understanding the procedure & complications
- Having the right expectations
- Diet and Exercise
- Compliance: Vitamins, follow-up appointments, lab maintenance, not smoking
- Team approach at an Accredited Bariatric Surgery Center

Surgical Options



Gastric Bypass



Sleeve Gastrectomy

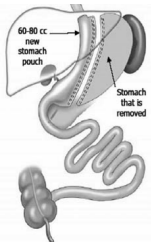
Gastric Band

Principles of Surgery

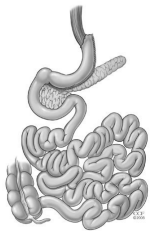
- Malabsorption
- Restriction
- Hormonal
- Combination

Sleeve Gastrectomy

- Works through restriction and hormonal efforts
- Weight loss over 1-year period
- Weight loss above band but below GBP
- Best for: BMI 35-50
- Concern with those who have Acid Reflux/ Barrett's
- Over 1K cases at EMMC since 2008
- Most common weight loss procedure in the world
- 60-65 % of cases now are sleeve at NL EMMC



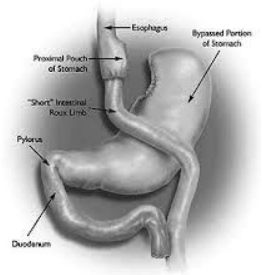
Possible Complications After Sleeve Gastrectomy



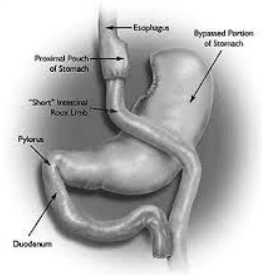
Short Term
- Leaks
- Bleeding
- Blood Clots
- Stricture
- Obstructions
- Death

Long Term
- Sleeve dilation
- Acid reflux: 20-30% occurrence

Gastric Bypass Surgery



Gastric Bypass Surgery



- Works through restriction, malabsorption, and hormones
- Weight loss over 1 to 2 year period
- Best weight loss of all 3 procedures
- Most effective and complicated

Gastric Bypass Surgery

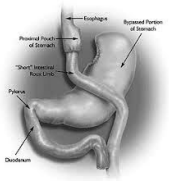
- Best for BMI 35-65 with other medical problems
- May offer best long term resolution of Type 2 diabetes compared to other procedures
- Need to consider for those with medication intolerance issues
- Caution for those who require life-long steroid or NSAID use

- Nearly 3K performed here since 2002

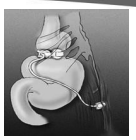
Possible Complications After Gastric Bypass

Short Term
- Leaks
- Bleeding
- Blood clots
- Obstruction/Blockage
- Reoperation
- Readmission
- Death

Long Term
- Strictures
- Ulcers
- Dumping Syndrome
- Gallstones
- Obstruction
- Hernias (internal or external)
- Malnutrition
- Medication Complications
- Hypoglycemia

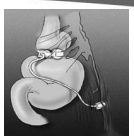


Adjustable Gastric Band



- Works through restriction only
- Slower and less weight loss than bypass and sleeve
- Best for: BMI under 50 without major medical issues
- Needs multiple adjustments:
  Consider: travel, child care, $$, gas $, time out of work)
- Best for those who are highly motivated, mobile with BMI less than 50. Less effective in higher BMI's
- At EMMC 9% of our bands have been removed due to erosion, slippage, intolerance and acid-reflux.

Possible Complications After Gastric Banding



Short Term
- Gastric wall perforation
- Erosion
- Esophagus injury
- Blood clots
- Pouch dilatation
- Outlet obstruction
- Hardware problems

Long Term
- Erosions
- Ulcers
- Slippage
- Hardware problems
- Gallstones
- Esophageal dilation/dysfunction

Surgery Complications: Why Do They Occur?

Surgeon Factors
- Technical Problems During Surgery
- Surgeon Experience

Patient Factors
- Overall Health, Age, and Sex
- Body Shape and Size
- Psychological Factors
- Inappropriate Behaviors

Unexplained Factors

Northern Light Surgical Weight Loss Complications: 2014 through 2018

30-Day Complications	Readmission %	Return to OR %	Leaks	Mortality
Bypass (386 cases)	4.1% (4.6%)	2.3%(1.9%)	0% (0.3%)	0%(0.2%)
Band (13 cases)	7.6% (one readmit)	0.00%	0%	0%
Sleeve (747 cases)	1.3% (2.2%)	0.8% (0.8%)	0% (0.13%)	0% (0.1%)

The red numbers in parenthesis represent benchmarks from other Bariatric Accredited programs

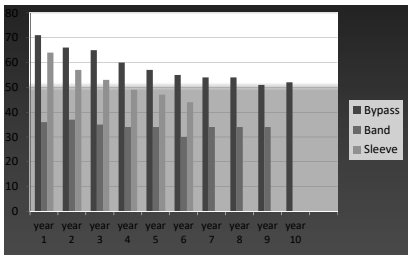
OK But How Safe Is It?

- Gallbladder surgery 0.52 **WLS 5X safer**
- Hip replacement 0.93 **WLS 9X safer**
- CABG 3.3 **WLS 33 X safer**
- Pancreatic surgery 8.0 **WLS 80 X safer**
- **Bariatric surgery 0.1 (for all surgeries combined)**

0.1 is the equivalent of 1 death per every 1000 patients.

Risks are increased for patients who are male, older, heavier or have significant health issues

Percent of Excess Weight Loss in our program: 2002-2019



Expected Weight Loss @ 5-Years

- **Band:** 30-35 lbs. per 100 excess lbs.
- **Sleeve:** 40-50 lbs. per 100 excess lbs.
- **Gastric Bypass:** 50-60 lbs. per 100 excess lbs.

- These are averages
- Long-term diet and exercise compliance are the greatest influence to these numbers

Surgical Approach: Robotic/ Laparoscopic

- All procedures completed minimally invasive
- 5 to 7 small incisions
- General anesthesia
- Time of surgery: Band : 1 hour
  Sleeve: 1-1.5hours
  Bypass: 1-1.5hours

- Hospital stay: 2 days bypass/sleeve; 0-1 day band
- Recovery: 2 to 4 weeks: lifting restriction

Benefits of Weight Loss Surgery

- Weight loss (50-75% excess body weight)
- Improvement in blood pressure, blood sugar, and cholesterol levels (80-95% resolved)
- Improved sleeping/breathing
- Enriched quality of life
- More energy/self-esteem
- Increased fertility/libido

Risks of Not Having Surgery

- Morbidly obese individuals may die 10-15 years sooner
- Poor/decreased quality of life
- Increase in the number and severity of health conditions
- Other surgeries needed due to obesity: gallbladder, joints, heart
- Need for more medications to treat other health issues

Risks: Pregnancy

- Increased risk of pregnancy due to changes in hormonal levels

- Pregnancy is best avoided for 12-18 months postop. Check with your surgeon for specific time frame.

- **Birth Control Recommendations**:
  - Avoid oral contraceptives after gastric bypass—unreliable absorption and may increase the risk of clotting in the early postop period
  - IUD may be the most effective form as its effectiveness is unchanged by your changing BMI
  - Though other forms exist many have an unintended side effect of weight gain which we want to help you to avoid

Risks: Nutritional

- Dumping (bypass and sleeve)
- Nausea and or vomiting
- Lactose intolerance
- Excess gas
- Vitamin and mineral deficiency (Iron, B-12)
- Changes in bowel habits (diarrhea or constipation)
- Dehydration

Dietary Changes

- No alcohol--it is absorbed much quicker after GBP and Sleeve surgery and is a high source of calories; increased risk of cirrhosis of the liver with drinking after weight loss surgery
- Surgery may help control appetite but will not prevent poor food choices and bad eating habits
- Some food choices may not be well-tolerated such as beef, sweets and starches, dairy products, fried foods
- No drinking with meals or for 1/2 hour before and after meals
- Avoid calorie rich beverages, including energy drinks and coffee with many additives
- No carbonation or chewing gum

Getting Ready

- Eliminate all fried foods and fast food
- Eat breakfast each day
- Eliminate all soda, high calorie beverages and juice
- Abstain from alcohol, nicotine and marijuana
- Lose weight (weight gain or failure to lose weight will slow your process to surgery)
- Stop eating after your evening meal
- Talk with family members about how eating will change
- Preventable health screenings (colonoscopy, mammogram, etc.) must not be overdue

Getting Ready: Weight Loss

Weight Loss assigned at first nutrition group appointment. Height and weight from this class to determine starting BMI and necessary weight loss.

- BMI 35-41.9: weight maintenance focus
- BMI 42-49.9: must lose 5% excess body weight
- BMI 50+: must lose 10% excess body weight
- BMI above 65, additional help may be needed and will be available to get BMI closer to 60
- Dietitian can help you calculate excess body weight
- Weight loss to occur before last program dietitian visit in order to schedule with surgeon

Getting Ready

- **Blood work:** We will arrange for baseline blood tests for baseline vitamin/mineral status after your surgeon visit
- Try your **protein drinks** before surgery
- Increase **activity**
- Get **blood sugars** under control. Goal hemoglobin A1C to <8 to see the surgeon
- Purchase **vitamin/mineral supplements** once instructed
- Know your specific insurance requirements. Program Manager can assist.

Sleep Apnea Testing

- Please make sure you turn in your Sleep Disorder Screening Questionnaire before leaving
- Untreated sleep apnea poses increased surgical risk
- EMMC treats all sleep apnea
- >80% sleep apnea is resolved after weight-loss surgery
- Bring your CPAP/BiPAP machine to the hospital
- We will ask for a download of your machine to look at compliance. If you are currently treated, contact your company to have them send a download to us

Appointments: Bariatric Dietitian

- First visit we will weigh and measure you (BMI)
- Weight loss assignment at the first visit
- Diet and weight history
- Review of postoperative diet changes
- Discuss vitamin/mineral recommendations
- Discuss realistic expectations for weight loss
- Advance diet and vitamins postoperatively
- Assist with weight loss surgery support group
- Available by phone or e-mail with questions

Appointments: Psychologist

- Assess your ability to handle major life decisions
- Assess your coping mechanisms and support system
- Recommendations to the surgeon for your success
- Lengthy standardized test taken during the visit
- Depression common in surgical candidates
- May indicate need for pre or post-op counseling requirement
- 2-2.5 hour visit is the norm

Appointments: Physical Therapist

- Online class or 1:1 Physical therapy appointment depending upon your needs
- Assess ability to perform activities of daily living
- Getting started with a safe exercise program

Surgeon Consultation

- Verify height and weight (any weight gain will require a follow up surgeon visit slowing the process down)
- Expect weight loss since the last dietitian appointment
- Bring your support person with you if possible
- Review specific procedures/answer questions
- Complete a history and a physical
- Surgeon staff begins precertification/authorization with insurance

Surgery Preparation: No tobacco or marijuana products

After surgery, smokers are at very high risk for these complications:

- Bleeding, vomiting blood and passing blood in stools
- Constant pain
- Perforations
- Strictures
- Death
- May require a reversal of your gastric bypass

Surgery Preparation: NSAIDS and More

- You must be on the lowest dose possible of narcotics with a note from your prescribing physician. The overall goal is to be off them if possible. Methadone and suboxone affect bowel function and must be stopped before your surgeon visit.
- No NSAIDS for 2 weeks before surgery for any weight loss surgery.
- After surgery, band and sleeve patients may resume NSAID use, but bypass patients can NEVER take again.
- Discuss alternatives with your physician. Beware of NSAIDS hidden in OTC meds (i.e. Alka Seltzer) and injectables such as Toradol

Benefits of a Pre-Surgery Weight Loss

- Lower weight = lower surgical risk
- Fatty liver common in bariatric patients
- Weight loss shrinks size of the liver making movement during surgery easier
- May allow for better viewing of stomach during surgery
- Reinforces your confidence and commitment to surgery
- Does not make insurers deny surgery due to belief you don't need it because you lost a few pounds
- What if your BMI is just 40 now?

Your Hospital Stay

- Phone call from anesthesiologist at home before surgery
- Length of stay varies: Bypass - 2 nights
  Band - 0 to 1 nights
  Sleeve - 2 nights
- No eating 12 hours prior to surgery
- May take one shift to get your pain under control
- Early ambulating and breathing exercises
- Liquid diet on discharge (high protein liquids)
- Discharge medications
- First days home - lifting restrictions 10-20# first 6 weeks

Follow Up

Surgeon:

- 2 weeks post-op, 6 weeks, 6 months, 12 months, 18 months, then annually

Team Support:

- 2 weeks, 6 weeks, 3 months, 6 months, 9 months, 12 months, 18 months, then annually
- Psychologists who specialize in disordered eating and weight loss surgery as needed after surgery

Support Groups available statewide and online

How Do I Get To Surgery?

- Get a referral from your Primary Care Physician
- After this class, attend at least one support group in the next few months
- Northern Light Surgical Weight Loss will set up appointments and mail to you in < 2 weeks if your referral is here already
- Time to surgery is usually 5-8months after this class and varies greatly with insurance

Next Steps For You:

- Support Group attendance at one required (times/dates in your red binder):

✓ In-Person: EMMC – Bangor
✓ Inland – Waterville
✓ TAMC - Presque Isle
✓ Online

- Read your red education binder
- Focus on diet and exercise behaviors
- Contact Lynn Bolduc, RD, Manager for questions at 973-4940; email: Lbolduc@northernlight.org
- For more information about Northern Light Non-Surgical Weight loss contact 275-4440

Thank you for attending today's information session