What to know about bariatric surgery nowadays

Dre Christelle Theriault

Bariatric and General Surgeon

Moncton, April 2023

Conflict of interest

- Presenter for ASCEND international project
  - Educational branch of Novo Nordisk for obesity

Morbid obesity = chronic disease

Complex and multifactorial

- Genetic
- Hormonal
- Metabolic
- Lifestyle
- Psychologic

Different treatment available

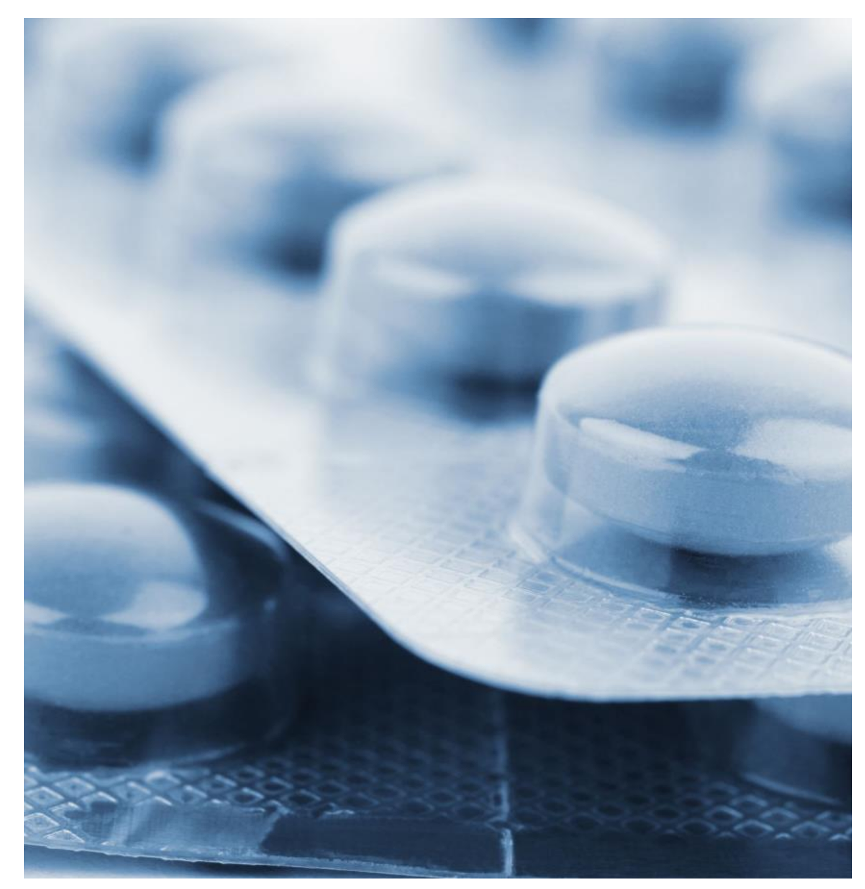
- Lifestyle modification
- Medicalt treatment
- Surgical treatment

What qualifies a patient for bariatric surgery in 2023

- BMI
- Motivation/Compliance
  - ✓ Desire to adopt a healthier lifestyle
- Medical treatment failure?
- Comorbidities
- Absence of contraindications
  - Mental health issues
  - Severe medical condition
  - Smoking/drugs/alcohol

Medical treatment

- BMI >27 with comorbidities or BMI>30
- Options :
  - Liraglutide/Semaglutide (Saxenda/Ozempic)
    - Type 2 Diabetes
  - Naltrexone/Buproprion (Contrave)
    - Depression
  - Orlistat
    - Constipation
- ALWAYS associate with a lifestyle modificaiton
- Good option when surgery's not possible
- ''Is it for life, doctor?''
- What is considered a failure ?
  - Expected weight loss 5-15 %



Bariatric Surgery: Basic selection criteria

Age 18-60 (up to 65)

BMI >35 with comorbidities or BMI >40

* Type 2 Diabetes

* Hypertension

* Dyslipidemia

* Sleep apnea

* Infertility

* Severe joint disease

* others : NASH, GERD, SOPK, pseudotumor cerebri

Bariatric surgery : Basic selection criteria

Individual has failed to lose weight or maintain long-term weight loss despite appropriate and sustained interventions

- Motivation
- Compliance
- Understanding of necessary changes in lifestyle
- Need of a multidisciplinary team for support

Accept life-long follow up and vitamins intake

Exclusion criteria

- Severe cardiopulmonary disease
- Current drug or alcohol abuse
- Reversible endocrine disorder than can cause obesity
- Lack of ability to comprehend the risk, benefits, expected outcomes, alternatives and required lifestyle changes of bariatric surgery
- Existing uncontrolled severe psychological illness
- Disease that is life-threatening in the short-term (cancer)
- Individual who is unable to care for themselves and has no long-term family or social support

How to prepare a patient prior to their bariatric surgery consultation

- Evaluation of lifestyle habits and initiate improvement
  - *Smoking cessation
  - *Motivational interviewing
  - *Setting expectations
  - *Encourage support network
- Screening for comorbidities and appropriate treatment in order to decrease risks peri-operatively
  - Sleep apnea
  - Diabetes
  - Hypertension
  - Fatty liver (hypocaloric shakes pre-op)

Prior to their bariatric surgery consultation

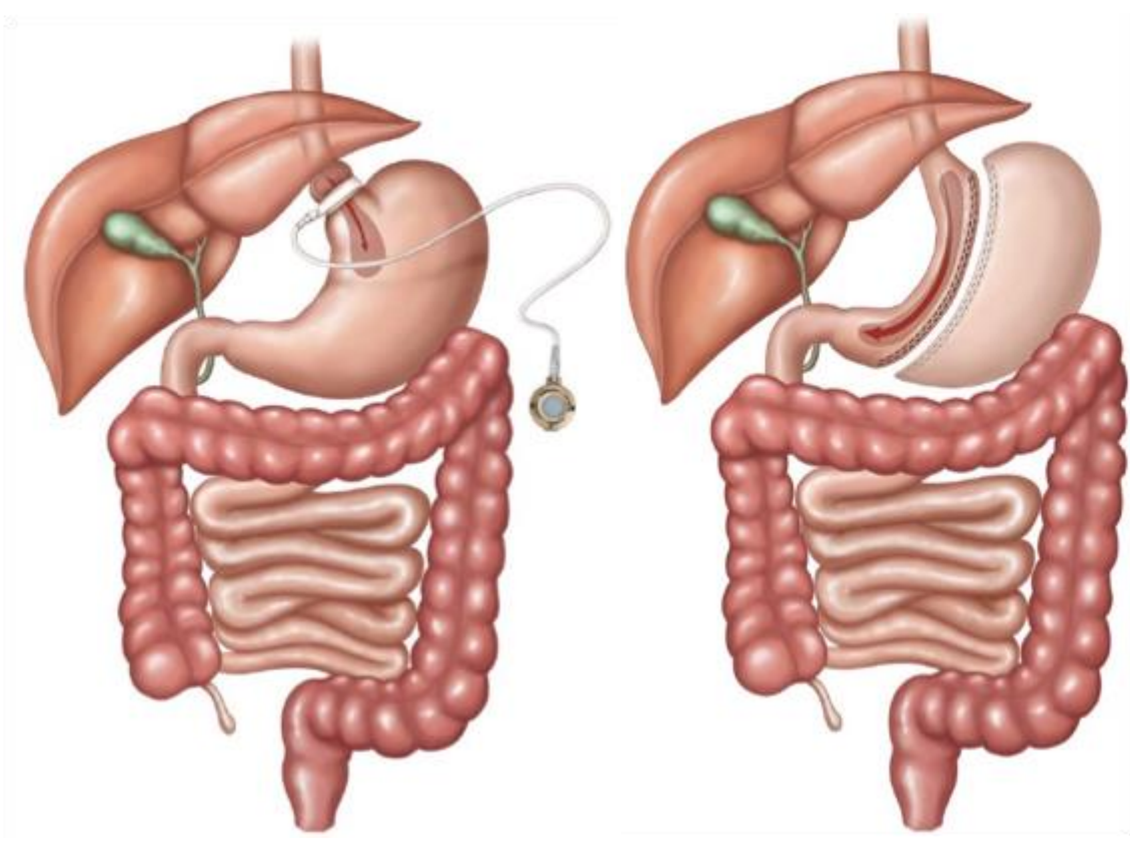
If possible, refer to :

- **Dietician**
  - ❖To address nutrition basics (stop pop/juices, 3 meals/day and snacks, explain different food groups)
- **Kinesiologist and/or physiotherapist**
  - ❖Introduce physical activity appropriate to their capacity
  - ❖Address chronic MSK pain
- **Psychologist**
  - ❖Assess emotional eating and binge eating
- **Health coach**
  - ❖Help with motivation
  - ❖Live well NB

Overview of different bariatric surgeries

Lap band

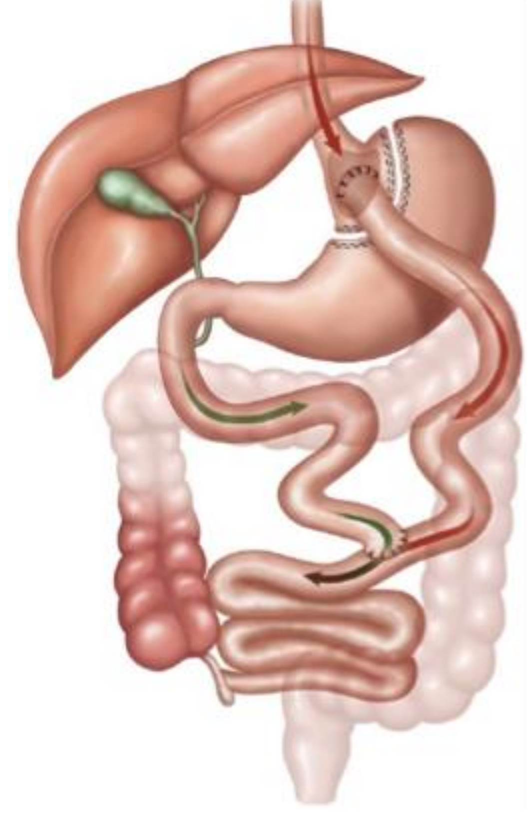
Sleeve



Weight Loss 15-25 %

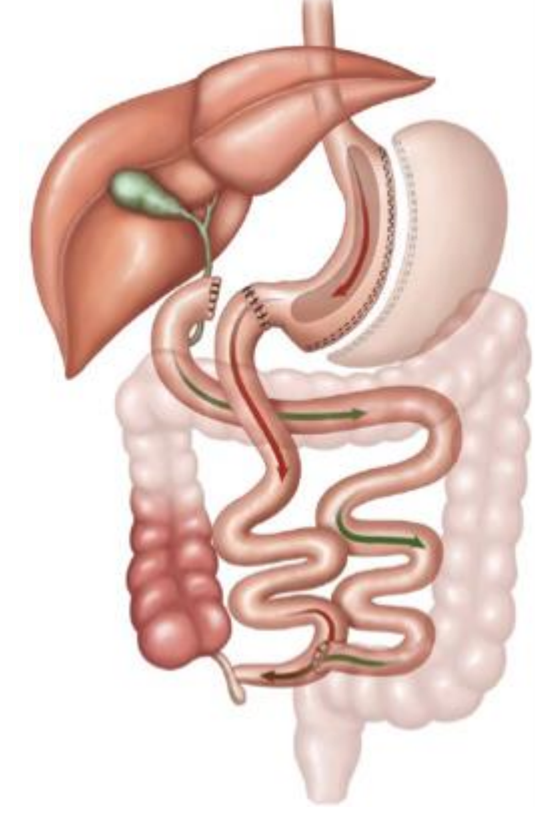
Weight Loss 25-35 %

Gastric bypass



Weight Loss 30-35 %

Duodenal switch



Weight Loss 35-50%

The physiology of bariatric surgery

Increase of satiety

- GLP-1
- PYY
- CCK

Decrease of hunger

- Ghrelin

Follow up

- Weight loss/plateau/weight regain
- Acid Reflux
- Nutritional deficiencies
- Improving/Resolution of comorbidities

Weight trajectory after bariatric surgery

- Weight loss
  - Usually occurs within the first 6 to 18 months post-op
- Plateau
  - Very common, different for every patient
- Weight regain
  - After 24 months, 50 % of patients will have regained some weight
  - Different causes :
    - Psychological issues that were not addressed
    - Lack of compliance
    - Metabolic/hormonal factors (adaptive mecanisms post weight loss)
    - Surgical factors

Acid Reflux post Sleeve

- 1/3 will get worse
- 1/3 will get better
- 1/3 will remain unchanged

- If long-standing GERD pre-op: assess with gastroscopy
  - ➢ R/O Barrett

- If worse post-op
  - Optimal medical management
  - Gastroscopy
  - Surgical revision (conversion to gastric bypass)

Nutritional deficiencies

- Iron
- B12
- Calcium
- Vitamine D
- Vitamine A
- Others : Vitamine E, zinc, copper, selenium , etc

Improvement and resolution of comorbidities

Diabetes	• Reduce oral glucose lowering therapies and insulin • *SGLT-2
Hypertension	• Reduce anti hypertensive drugs • *ACE inhibitors
Joint pain/chronic pain	• Be careful with NSAIDS, narcotics
Hypothyroidism	• Adjust synthroid according to TSH fluctuation post weight loss

Role of medication in obesity management in conjunction with bariatric surgery

- Different medications available
  - GLP-1 agonist (semaglutide, liraglutide)
  - Naltrexone/Bupropion
  - Orlistat
- Role of medication pre-op
  - Help to control comorbidities
- Role of medication post-op
  - Help to maintain weight loss
- Only medication, no more bariatric surgery ?
  - For some patients

Take home message

- Patient is the key to his own success no matter which treatment is proposed
- Discuss expectations with patient (for either medical or surgical treatment)
- Patient will need long-term follow up
- Use of anti-obesity medication post-surgery can help maintain long-term weight loss

Thanks