Insufficient Weight Loss and Weight Regain: Medical Management Post-Bariatric Surgery

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SENTARA COMPREHENSIVE WEIGHT LOSS SOLUTIONS

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Early, Frequent, Sustained Medical Intervention Is Always Best

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As previously disclosed, I have no financial or other relationships with any companies.

Objectives

- Describe a treatment plan for obesity
- Review FDA approved anti-obesity medications (AOMs) and medications commonly used as AOMs
- Define "insufficient weight loss" (IWL) and "weight regain" (WR)
- Discuss cases
- Questions

Describe a treatment plan for obesity

> Obesity is defined as a **chronic, progressive, relapsing, and treatable multi-factorial, neurobehavioral disease**, wherein an increase in body fat promotes adipose tissue dysfunction and abnormal fat mass physical forces, resulting in adverse metabolic, biomechanical, and psychosocial health consequences.

- Obesity Medicine Association (OMA) obesity definition

OMA algorithm overview of the management of obesity

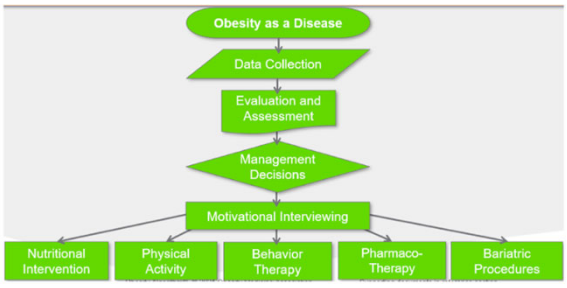

Fig. 1. Obesity Medicine Association Algorithm Overview of the Management of Obesity. Shown is the OMA overview of the management of obesity, starting with the treatment of obesity as a disease, collecting data, evaluating, assessing, making patient-centered management decisions, engaging in motivational interviewing, and implementing anti-obesity therapies (e.g., nutrition, physical activity, behavior modification, pharmacotherapy, and/or bariatric procedures).

Fitch, A.K. and Bays, H.E. *Obesity Pillars 1*. 2022.

> "While adequately dosed lifestyle interventions may unilaterally achieve success, obesity is a complex, multifactorial disease wherein patients may require approaches beyond lifestyle alone. However, lifestyle interventions are too often not adequately 'dosed' for success."
>
> - Obesity Medicine Association (OMA) obesity definition

> "A comprehensive lifestyle medicine approach prevents and treats many other co-morbidities associated with overweight and obesity, including, but not limited to, hypertension, high cholesterol, heart disease, type 2 diabetes, and arthritis, and a lifestyle medicine approach can also reduce the risk of many types of cancer. Lifestyle medicine must become the foundation of comprehensive treatment, with or without surgery and/or medications as adjunctive therapies."
>
> - American College of Lifestyle Medicine (ACLM) obesity position

Review FDA approved AOMs & meds commonly used as AOMs

FDA Approved AOMs: "on-label"

Sympathomimetics

Phentermine (sched IV)

Diethylpropion (sched IV)

Phendimetrazine (sched III)

Benzphetamine (sched III)

Phentermine HCl/topiramate combo pill

GLP-1 RAs

Liraglutide 3.0 mg

Semaglutide 1.7 mg or 2.4 mg

Other

Naltrexone/bupropion HCl combo pill

Orlistat

Cellulose/citric acid hydrogel (device)

*Setmelanotide

- Inherited metabolic disorders

*Lisdexamfetamine (sched II)

- Binge eating disorder

Commonly Used as AOMs: "off-label"

Sympathomimetics

Phentermine (sched IV)

Diethylpropion (sched IV)

Phendimetrazine (sched III)

Benzphetamine (sched III)

***for >3 months**

GLP-1 RAs

Liraglutide 1.8 mg

Semaglutide (injectable)

Semaglutide (oral)

Exanitide

Dulaglutide

Tirzepatide

GLP1/GIP RA

Other

Naltrexone

Bupropion

Topiramate

Metformin

Define IWL and WR

Insufficient Weight Loss

- Primary surgical non-responder

Eligible Population in the US

- Percent of adults aged 20 and over with obesity: 41.9% (2017-March 2020)
- Percent of adults aged 20 and over with overweight, including obesity: 73.6% (2017-2018)
- So…**3 out of 4 people in the US were eligible for MWL interventions – prepandemic**
- Very few patients do not meet criteria for MWL

National Health and Nutrition Examination Survey 2017-March 2020 Prepandemic Data Files-Development of Files and Prevalence Estimates for Selected Health Outcomes, table 5.pdf icon(PDF – 436 KB)
Prevalence of Overweight, Obesity, and Severe Obesity Among Adults Aged 20 and Over: United States, 1960-1962 Through 2017-2018

MWL For EVERYONE!!

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- Pre-obesity
- Pediatric and adolescent pre-obesity and obesity
- Geriatric pre-obesity and obesity
- Provide treatment via telehealth for hard-to-reach populations
- High surgical risk patients desiring eventual bariatric surgery
- Bridging treatment for high BMI patients after sleeve if plan to convert to bypass
- Co-management of patients treated with non-surgical procedures

…and I mean EVERYONE!!

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- Primary surgical non-responders
  - Insufficient weight loss (IWL) than expected
- Secondary surgical non-responders
  - Weight regain (WR) after a successful primary procedure
- Non-surgical patients who have cycled through diet plans

Vinciguerra F, Romeo LM, Frittitta L, Baratta R. Pharmacological treatment of nonresponders following bariatric surgery: a narrative review of the current evidence. Minerva Endocrinol (Torino). 2021 Apr 1. doi: 10.23736/S2724-6507.21.03311-3. Epub ahead of print. PMID: 33792233.

Why MWL Works for These Patients

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- Take into account
  - Comorbid conditions
  - Behaviors
  - Physical activity
  - Support systems
  - Family history
- Develop an individualized, stepwise, comprehensive treatment plan
- Multi-disciplinary team working with patients early and often
- Maintenance plans

Anti-Obesity Medications

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- Integral treatment modality for all patients
- Should be considered at every stage of disease and every visit
- Change the physiology of body weight regulation
- Offer additional therapeutic options to attain long-term success
- Can and should be used in combination where appropriate
- Induce improvement or slow progression of obesity-associated illnesses through
  - Weight loss
  - Weight-loss maintenance
  - Slowing of progressive weight gain

Bray, Obesity 2013;21:893
Patel, DK & Stanford FC (2018). *Postgraduate medicine*, 130(2),173-182.

AOMs in IWL and WR

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The utility of weight loss medications after bariatric surgery for weight regain or inadequate weight loss: A multi-center study

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- Retrospective, 2000-2014
- RNY or SG
- 319 charts included
- 54% (n=172) of all pts lost >5% of TBW post-surg + AOM
- "Patients were more likely to be prescribed medications after weight regain (78.5%; n = 249) had occurred than at their plateau (21.5%; n = 68). However, patients that were prescribed medications at their plateau had a higher cumulative total weight loss (32.3%) than those who were prescribed medication after weight regain (26.8%) (*P* = .486)"
- Few meds were included

Surg Obes Relat Dis. 2017 Mar;13 (3):491-500

AOMs in IWL and WR

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- Semaglutide 2.4 mg weekly
- Liraglutide 3 mg daily
- Phentermine
- Topiramate
- Phentermine/topiramate
- Bupropion
- Naltrexone
- Naltrexone/bupropion
- GLP-1 RAs have been a game changer
- Used in combo with more traditional AOMs for IWL and WR – future pathway

In conclusion…

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- Early individualized treatment plans in a multi-disciplinary team environment will prove superior to stand-alone interventions
- Long-term use of AOMs in conjunction with definitive weight loss surgeries may be the future
- Prevention of the disease of obesity is ideal, but intervening early is essential – MWL is key

What some of you may be thinking…

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…but I'm okay with that.