

Breakfast of Champions: Innovations in Weight Management

Breakfast of Champions | March 8, 2023

Care Transformation Collaborative of RI



CTC-RI Conflict of Interest Statement

If CME credits are offered, all relevant financial relationships of those on the session planning committee have been disclosed and, if necessary, mitigated.

Claim CME credits here: https://www.surveymonkey.com/r/ZDZS5HG



The AAFP has reviewed 'Advancing Comprehensive Primary Care Through Improving Care Delivery Design and Community Health,' and deemed it acceptable for AAFP credit. Term of approval is from 03/18/2022 to 03/18/2023. Physicians should claim only the credit commensurate with the extent of their participation in the activity. NPs and RNs can also receive credit through AAFP's partnership with the American Nurses Credentialing Center (ANCC) and the American Academy of Nurse Practitioners Certification Board (AANPCB).



Objectives

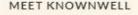
- Learn about and discuss updated guidelines, medications, and treatment approaches to overweight in adult and pediatric populations
- Review and discuss special considerations with pediatric patients and families
- Hear and discuss employer and health plan viewpoints



Agenda

| Presenter/Topic | Time |
|---|------------|
| Welcome Linda Cabral, MM, Senior Program Manager | 5 minutes |
| Presentation Angela Fitch, MD, FACP, Dipl. ABOM, Chief Medical Officer, KnownWell Health | 20 minutes |
| Presentation Stephen J. Kogut, PhD, MBA, RPh, University of Rhode Island | 20 minutes |
| Reactants Sarah Hagin, PhD, Director, Feeding Program, Hasbro Children's Hospital Susan Andrews, MD, Medical Director, General Dynamics Electric Boat LouAnne Giangreco, MD FACEP, Senior Medical Director-Medical Affairs, BCBSRI | 15 minutes |
| Q&A / Discussion | 30 minutes |

CHRONIC DISEASE MANAGEMENT FOR OPTIMAL OBESITY CARE



Angela Fitch, MD, FACP, Dipl. ABOM CHIEF MEDICAL OFFICER KNOWNWELL PRESIDENT OBESITY MEDICINE ASSOCIATION



DrFitch@knownwell.health



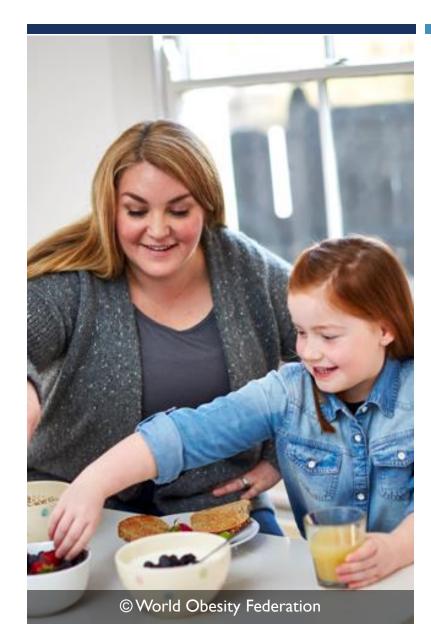
CLINICAL LEADERS IN OBESITY MEDICINE®

Disclosures

- Vivus advisory board
- SideKick Health advisory board
- Jenny Craig Science Advisory Chair
- NovoNordisk advisory board
- Eli Lilly advisory board
- Suvie advisor

Objectives

| Understand | Understand the most effective treatments for the disease of obesity using the pillars of obesity treatment |
|------------|--|
| Review | Review pharmacotherapy for obesity and develop an obesity treatment plan |
| Gain | Gain knowledge of how to personalize the treatment plan for optimal outcomes with shared-decision making tools |



OBESITY IS A <u>CHRONIC TREATABLE DISEASE</u>

- Obesity
 - a disease in which <u>excess body fat</u> has accumulated in a dysfunctional manner to a level that may have an adverse effect on health.
- It's about biology not BMI ultimately.
- BMI is a tool used in diagnosis
 - Pre-obesity BMI 25-29.9
 - Class I obesity BMI 30-34.9
 - Class II obesity BMI 35-39.9
 - Class III obesity $BMI \ge 40$



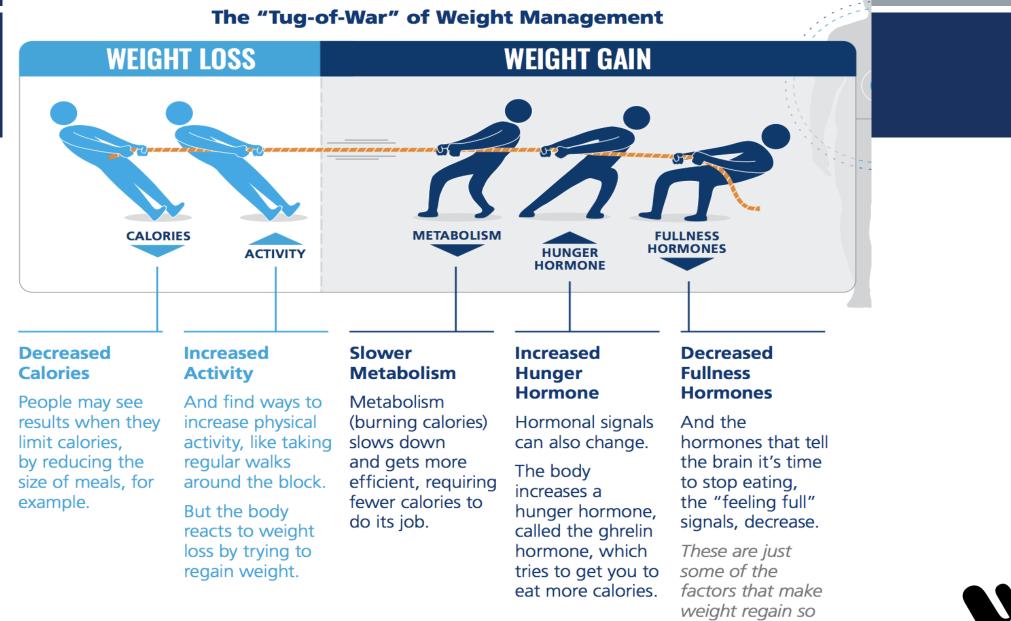
OBESITY STIGMA AND BIAS





- People and society places blame and shame on the disease
- Ask permission to discuss the disease and how it affects the individual
 - Metabolic
 - Physical/functional
 - Psychological
- Consider delivering care in a trauma informed fashion
- Use people first language
 - Remove "obese" from vocabulary

www.stopweightbias.com www.obesityaction.org



www.rethinkobesity.com

common.

Obesity Treatment, Beyond the Guidelines

Practical Suggestions for Clinical Practice

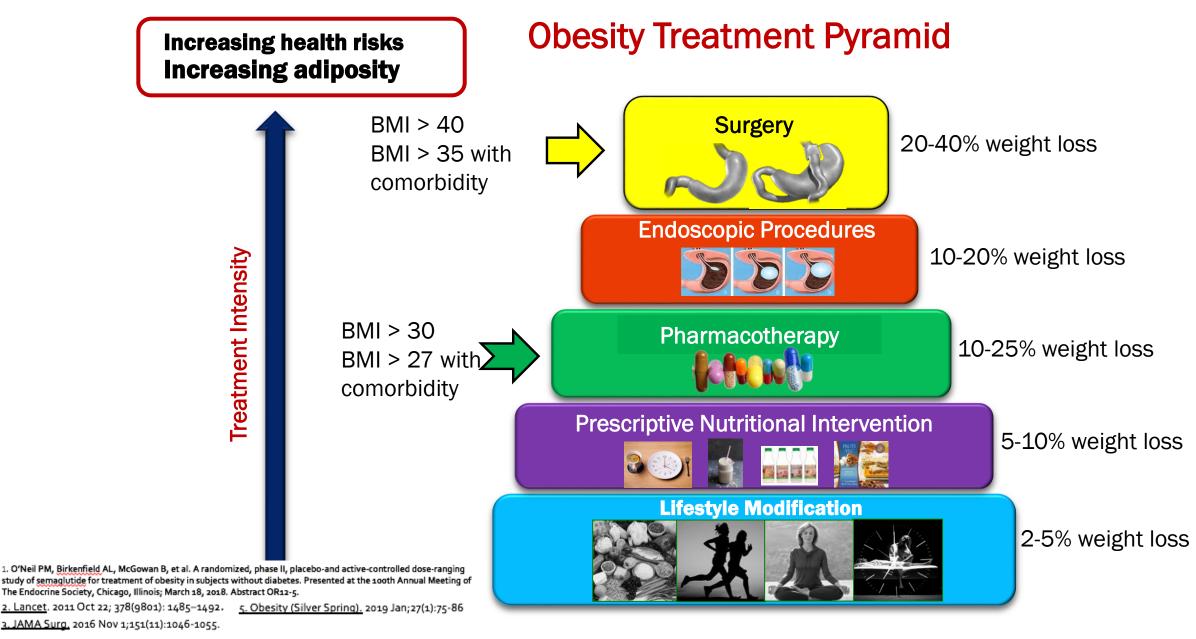
Scott Kahan, MD, MPH^{1,2}; JoAnn E. Manson, MD, DrPH^{3,4}

» Author Affiliations

JAMA. 2019;321(14):1349-1350. doi:10.1001/jama.2019.2352

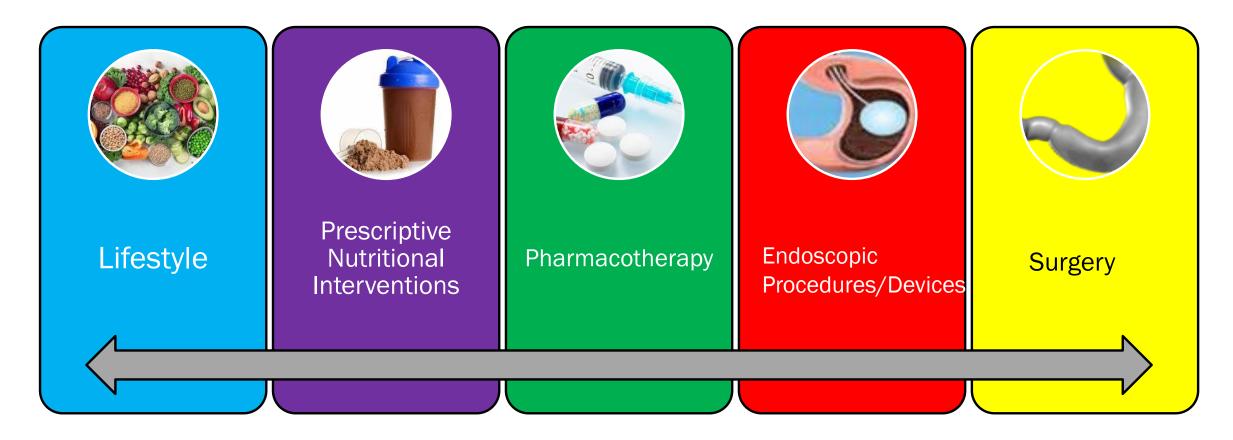
Table. An "ABCDEF" Approach to Guide Weight Counseling in Primary Care

| | Steps | What to Do |
|--|--|---|
| | Ask "permission" | Assess patient readiness to discuss weight issues. Consider begining the conversation with questions such as, "Your weight has been increasing over the years, which could lead to diabetes and other health problems. Would it be okay if we started working together on this?" |
| | Be systematic in the clinical workup | Elicit weight history, motivations, barriers, and social determinants. Medications that may cause weight gain include some antidepressants, antipsychotics, insulin, sulfonylureas, steroids, and pain medications. |
| | C ounseling and support | A wide range of dietary patterns can help weight management. Physical activity, even just walking, is essential for health. Use free online tools and resources, such as Dietary Guidelines for Americans, obesity treatment guidelines, and the Diabetes Prevention Program curriculum and handouts. |
| | Determine health status | • Evaluate for weight-related health conditions (eg, diabetes, sleep apnea), physical limitations, and decreased quality of life. |
| | Escalate treatment when appropriate | Consider medication (BMI ≥27) or bariatric surgery (BMI ≥35) when weight-related health conditions are present. Medication options for long-term use include orlistat, lorcaserin, phentermine/topiramate-extended release, naltrexone/bupropion-sustained release, and liraglutide. |
| | Follow up regularly and leverage available resources | Create a care team by identifying local obesity specialists (eg, obesity medicine physicians, registered dietitians), community programs (eg, YMCA-based diabetes prevention program), and other resources (eg, commercial weight-loss programs, health coaches, digital or telehealth platforms). A few minutes at the end of an unrelated appointment can be used to check in on patients' progress and offer support. Utilize medical assistants and other office staff to save time by assisting with patient education, monitoring, and coordinating care. |

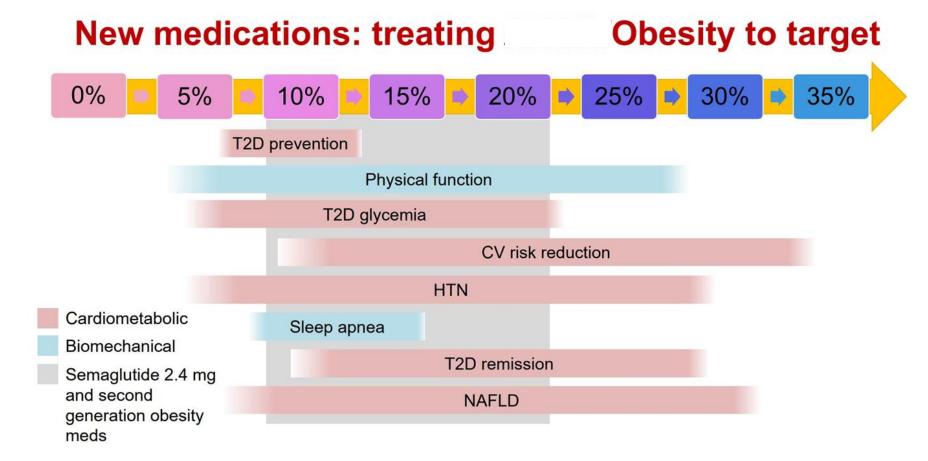


Obesity (Silver Spring). 2011 Jan; 19(1): 110–120.

REALITY OF TREATMENT



GOAL OF OBESITY TREATMENT



Garvey WT. New Horizons: A New Paradigm for Treating to Target with Second Generation Obesity Medications. JCEM 2022; 107(4):e1339-e1347

ASSESS FOR TREATMENT GOALS

- > 5% weight loss for diabetes prevention³
- > 10% weight loss for NAFLD resolution^{1,2}
- > 15-20% weight loss for diabetes remission⁴

¹Wong VW et al. J Hepatol 2013; 59:536-42

²Vilar-Gomez et al. Gastroenterology 2015; 149:367-78

³ N Engl J Med 2002; 346:393-403

⁴*The Lancet* Volume 391 Issue 10120 Pages 541-551 (February 2018)

| Pt GOALS | Favors Lifestyle | Favors Medication | Favors Surgery |
|---|------------------|-------------------|----------------|
| Needs > 20% weight loss | | ++ | +++ |
| Needs/wants diabetes resolution/remission | +/- | + | +++ |
| Needs/wants fatty liver disease resolution (>10%) | + | ++ | +++ |
| Needs/wants to prevent diabetes | ++ | +++ | +++ |
| No complications of obesity, wants weight loss | +++ | ++ | + |
| Wants to be free of medication | ++ | | +++ |

SHARED DECISION-MAKING EXAMPLE

PATIENT EXAMPLE



| | Lifestyle Modification | Prescriptive Nutritional Intervention | | | | macotherapy | Gold shading | = injection | Devices |
|------------------|---|--|---|---|---|---|--|--|-----------------|
| Weight loss % | % of patients in behavior programs (WW [®] , IBT) | % of patients in Virta® program | % of patients with surgery at 10 years | % of patients on tirzepatide 15mg once a week | % patients on semaglutide 2.4 mg weekly | % patients on liraglutide 3 mg daily (Plus IBT) | % patients on phentermine topiramate 15/92 mg | % patients on bupropion/ naltrexone (Plus IBT) | Gelesis -100 |
| >5% | 48% | 74% | 96.6% | 96% | 90% | 63% (<mark>74%)</mark> | 67% | 42% (66%) | 58.6% |
| >10% | 25% | 49% | >80% | 90% | 75% | 33% (<mark>52%)</mark> | 47% | 21% (41%) | 27.2% |
| >15% | 12% | | | 78% | 56% | (36%) | 32% | 10% (29%) | |
| >20% | 10% | | 72% | 63% | 36% | | 15% | | |
| >30% | 4% | | 40% | 23% | | | | | |

IBT = intensive behavioral therapy.

Wilding JPH, et al. *N Engl J Med*. 2021;384(11):989-1002. Jebb SA, et al. *Lancet*. 2011;378(9801):1485-1492. Maciejewski ML, et al. *JAMA Surg*. 2016;151(11):1046-1055. Wadden TA, et al. *Obesity* (Silver Spring). 2019;27(1):75-86. Athinarayanan et al. Front. Endocrinol., 05 June 2019 https://doi.org/10.3389/fendo.2019.00348; AM Jastreboff et al. N Engl J Med 2022. DOI: 10.1056/NEJMoa2206038

WHAT WORKS FOR OBESITY TREATMENT?

Structure

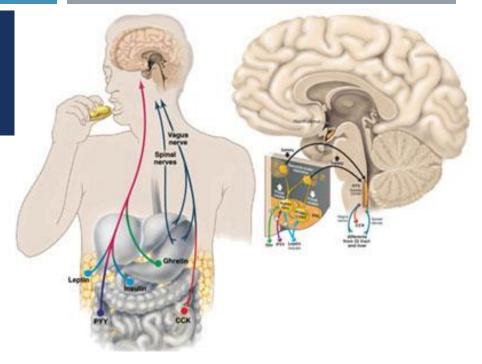
- Programs, meal replacements
- Accountability
 - Programming, follow up visits, virtual care, technology

Metabolic alterations to promote fat loss

Surgery, medications, dietary patterns, exercise intensity, sleep

Environmental stimulus control

Meal replacements, CBT, Acceptance based therapy





OBESITY TREATMENT PILLARS

ANTI-OBESITY MEDICATIONS

Objectives:

• Treat disease

Adjunct to nutritional, physical activity, and behavioral therapies for patients with $BMI \ge 30$ or $BMI \ge 27$ with co-morbidities

- Adiposopathy or sick fat disease (SFD)
- Fat mass disease (FMD)
- Facilitate management of eating behavior
- Slow progression of weight gain/regain
- Improve the health, quality of life, and body weight of the patient with overweight or obesity

5-10 percent weight loss may improve both metabolic and fat mass disease

CLINICAL PRACTICE STATEMENTS

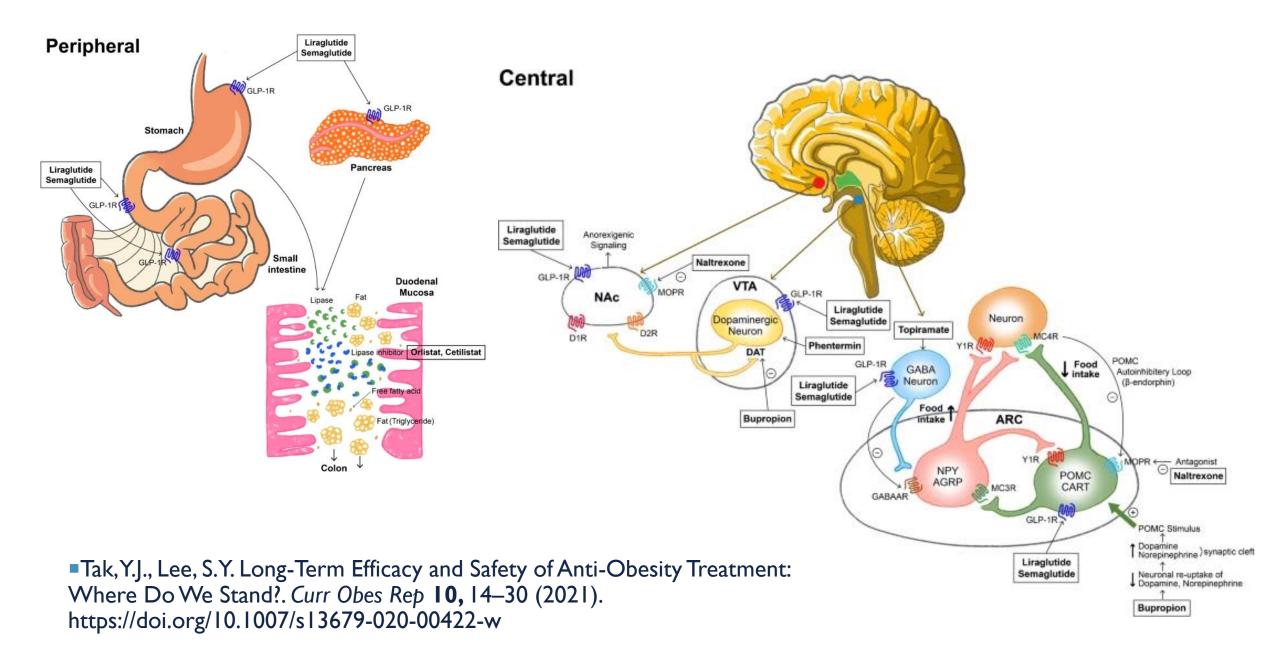


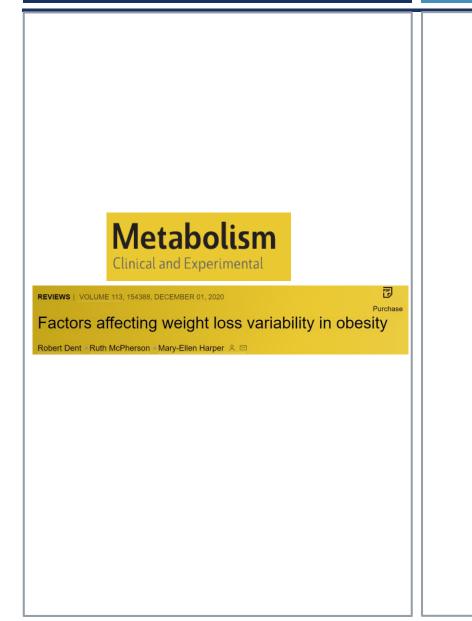


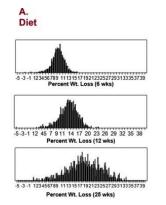


Anti-Obesity Medications and Investigational Agents: An Obesity Medicine Association (OMA) Clinical Practice Statement (CPS) 2022

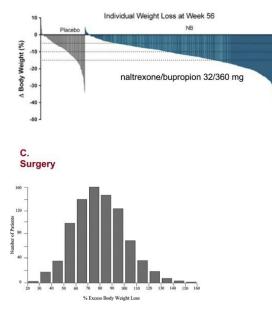
Harold E. Bays ^a ∧ ⊠, Angela Fitch ^b ⊠, Sandra Christensen ^c ⊠, Karli Burridge ^{d, e} ⊠, Justin Tondt ^f ⊠







B. Medication



VARIABLE RESPONSE TO INTERVENTION

CHOOSING MEDICATION

Is it covered by insurance?

- Medicare does not cover AOMs
- Medicaid is state dependent but covered in WI!!!!!!
- Phentermine, topiramate, bupropion, naltrexone, GLP-I

Assess for contraindications/risks

- GLP-1 pancreatitis
- Topiramate kidney stones, severe depression
- Phentermine cardiovascular risk, anxiety, bipolar d/o
- Bupropion seizure disorder
- Naltrexone opioid use

Assess for double benefits

- Topiramate for migraine or BED
- Bupropion for depression/ADHD

Does patient have diabetes, prediabetes or insulin resistance

- Consider metformin, SGLT-2 and GLP-1 first
- Off label use of GLP-1 with semaglutide, liraglutide or covered GLP-1

ADOLESCENTS/PEDIATRICS

- Liraglutide 3mg and Semaglutide 2.4mg approved to age 12
- Benzphetamine approved to age 12
- Phentermine approved to age 16
- Topiramate
- Lisdexamphetamine for BED
- Orlistat approved to age 12
- Setmelanotide for POMC def. down to age 6



CREATE AN OBESITY TREATMENT CARE PLAN

| Diagnose | Prescribe | Determine | Prescribe | Evaluate | Arrange | Consider |
|---|---|-------------------------------|---|--|---|---|
| Diagnose obesity by class I (BMI 30-34.9), 2 (BMI 35-39.9), 3 (BMI \ge 40) And consider stage of disease by severity of comorbidities | Prescribe a nutritional plan Tracking intake (Loselt, MyFitnessPal) Meal replacement plan like LookAHEAD or VLCD Prescriptive nutritional intervention Planned portions of plants and protein | Determine an activity goal | Prescribe medication if BMI \geq 27 with major medical condition or \geq 30 alone. Talk to patient about 2-4 times more likely to lose weight successfully and maintain. | Evaluate surgery anatomy if past history of surgery (upper Gl and/or EGD as indicated) | Arrange follow up 1-3 months (more accountability the better) | Consider remote monitoring or chronic care management for more accountability |

WHAT CAN WE DO NEXT?

Measures

• Operational Tracking

- Measure 1a: Prevalence of overweight and obesity in primary care across the organization
- Measure 1b: Prevalence of overweight and obesity in clinics targeted for the collaborative
- Measure 2: Obesity-related complications per patient

• Quality Performance

Measure 3: Documentation of obesity diagnoses Measure 4: Assessment for obesity-related complications Measure 6: Percent weight change in a 15-month period Measure 7: Prescribing of anti-obesity medications

Patient-Centered Care (Patient-Reported Outcomes)

Measure 5a: Number of patient-reported outcome measure surveys completed Measure 5b: Change in patient-reported outcome measure

https://www.amga.org/performance-improvement/bestpractices/collaboratives/obesity-care-model/





WORLD OBESITY DAY MARCH 4TH

THANK YOU!

DrFitch@knownwell.health www.knownwell.co



@angelakfitch



@drangelafitch



Meet

Comprehensive, empathetic healthcare -- *at any size*

Patient-centered physicians who are experts in obesity medicine and take insurance

Dr. Angela Fitch; Dr. Greg Curtis

- 15 Oak Street, Suite 3
- Needham, MA 02492

Virtual or in-person appointments available





To schedule, email: info@knownwell.health

For more information, visit www.knownwell.health

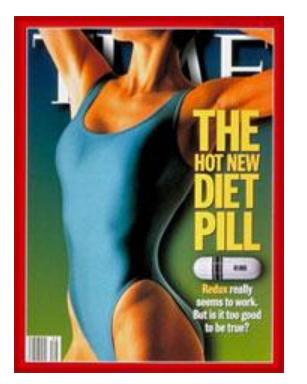
Anti-Obesity Medication (AOM)

Stephen J. Kogut PhD MBA RPh

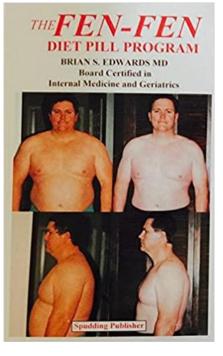
Professor, Department of Pharmacy Practice URI College of Pharmacy Kogut@URI.edu

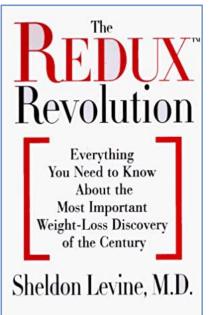
THE UNIVERSITY OF RHODE ISLAND



















HEIDI M. CONNOLLY, M.D., JACK L. CRARY, M.D., MICHAEL D. MCGOON, M.D., DONALD D. HENSRUD, M.D., M.P.H., BROOKS S. EDWARDS, M.D., WILLIAM D. EDWARDS, M.D., AND HARTZELL V. SCHAFF, M.D.

ABSTRACT

Background Fenfluramine and phentermine have been individually approved as anorectic agents by the Food and Drug Administration (FDA). When used in combination the drugs may be just as effective as either drug alone, with the added advantages of the need for lower doses of each agent and perhaps fewer side effects. Although the combination has not been approved by the FDA, in 1996 the total number of prescriptions in the United States for fenfluramine and phentermine exceeded 18 million.

Methods We identified valvular heart disease in 24 women treated with fenfluramine-phentermine who had no history of cardiac disease. The women presented with cardiovascular symptoms or a heart murmur. As increasing numbers of these patients with similar clinical features were identified, there appeared to be an association between these features and fenfluramine-phentermine therapy.

Results Twenty-four women (mean [±SD] age, 44±8 years) were evaluated 12.3±7.1 months after the initiation of fenfluramine-phentermine therapy. Echocardiography demonstrated unusual valvular morphology and regurgitation in all patients. Both right-sided and left-sided heart valves were involved. Eight women also had newly documented pulmonary hypertension. To date, cardiac surgical intervention has been required in five patients. The heart valves had a glistening white appearance. Histopathological findings included plaque-like encasement of the leaflets and chordal structures with intact valve architecture. The histopathological features were identical to those seen in carcinoid or ergotamine-induced valve disease.

Conclusions These cases arouse concern that fenfluramine-phentermine therapy may be associated with valvular heart disease. Candidates for fenfluramine-phentermine therapy should be informed about serious potential adverse effects, including pulmonary hypertension and valvular heart disease. (N Engl J Med 1997;337:581-8.) (91997, Masachusetts Medical Society. ENFLURAMINE and phentermine are prescription medications that have been individually approved by the Food and Drug Administration (FDA) as appetite suppressants for the treatment of obesity. When used in combination they may be just as effective as either drug alone, with the added advantages of the need for lower doses of each agent, fewer side effects, and improved patient tolerance.¹ Even though the FDA has not approved the use of the combination, in 1996 the total number of prescriptions for fenfluramine and phentermine in the United States exceeded 18 million.²

Pulmonary hypertension has been reported in association with treatment with fenfluramine^{3,4} or phentermine⁵ alone. The *d*-isomer of fenfluramine, dexfenfluramine, also increases the risk of pulmonary hypertension,⁶ particularly when patients receive high doses for more than three months. These drugs may cause pulmonary hypertension through the vasoconstrictor action of serotonin or by altering the depolarization of pulmonary vascular smooth-muscle membrane.⁷

Valvular disease has been reported after exposure to serotonin-like drugs such as ergotamine and methysergide⁸ and with increased serotonin levels associated with carcinoid disease.^{9,10} Valvular heart disease has not been reported in patients taking anorectic agents. We report 24 cases of unusual valvular disease in patients taking fenfluramine–phentermine.

METHODS

All the patients (Table 1) were identified during the course of routine evaluation for various clinical problems. No attempt was

From the Divisions of Cardiovascular Diseases and Internal Medicine (HM C., MDM, B S.E.) Preventive and Occupational Medicine, Endocrinology, and Internal Medicine (D.D.H.), Anatomic Pathology (W.D.E.), and Thoracic and Cardiovascular Surgery (H.V.S.), Mayo Clinic and Mayo Foundation, Rochester, Minn.; and the MericLare Medical Center, Heart Services, Fargo, N.D. (J.L.C.). Address reprint requests to Dr. Connolly at the Mayo Clinic, 200 First Sc. WK, Rochester, MN 55905.

The New England Journal of Medicine

© Copyright, 1998, by the Massachusetts Medical Society

VOLUME 339 SEPTEMBER 10, 1998



THE PREVALENCE OF CARDIAC VALVULAR INSUFFICIENCY ASSESSED BY TRANSTHORACIC ECHOCARDIOGRAPHY IN OBESE PATIENTS TREATED WITH APPETITE-SUPPRESSANT DRUGS

MEHMOOD A. KHAN, M.D., CHARLES A. HERZOG, M.D., JOHN V. ST. PETER, PHARM.D., GUILFORD G. HARTLEY, M.D., Richard Madlon-Kay, M.D., Candace D. Dick, M.D., Richard W. Asinger, M.D., and John T. Vessey, Ph.D.

TABLE 5. CASES OF CARDIAC-VALVE ABNORMALITIES MEETING THE CASE DEFINITION.

| GROUP | No. of Subjects | CARDIAC-VALVE Abnormalities | |
|---|--------------------|--------------------------------|--|
| | | no. of cases (%) | |
| Unexposed control subjects | 233 | 3 (1.3) | |
| Patients | 233 | 53 (22.7) | |
| Patients given dexfenfluramine | 39 | 5 (12.8) | |
| Patients given dexfenfluramine and phentermine | 31 | 7 (22.6) | |
| Patients given fenfluramine and phentermine | 163 | 41 (25.2) | |

Medications for Weight Loss

| FDA Approval | Name | Mechanism |
|-----------------------------|--|---|
| 1959 | Phentermine (Fastin™, Adipex™, Ionamin™) | sympathomimetic |
| 1999 | Orlistat (Xenical™ & Alli™) | lipase inactivation |
| 2012 | Phentermine/topiramate ER (Qsymia™) | sympathomimetic/GABA |
| 2014 | Naltrexone/bupropion (Contrave™) | opioid recept. antagonist/inhibit dopamine & NE reuptake |
| 2014 | Liraglutide (Saxenda™) | GLP-1 receptor agonist |
| 2020 | Setmelanotide (Imcivree™)* | melanocortin-4 receptor agonist |
| 2021 | Semaglutide (Wegovy™) | GLP-1 receptor agonist |
| Fast- tracked in 2022 | Tirzepatide (potential 2023 launch) | dual GIP/GLP-1 receptor agonist |

* Setmelanotide is approved for ultra-rare genetic conditions only

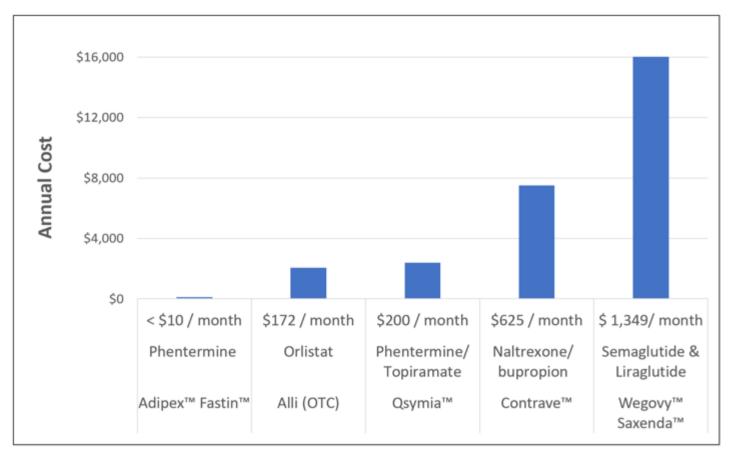
Indications, Efficacy and Cardiovascular Effects

| | Phentermine up to 12 weeks | Phentermine/ topiramate (Qsymia™) | Naltrexone/ bupropion (Contrave™) | Liraglutide (Saxenda™) | Semaglutide (Wegovy™) | |
|-------------------------------------|--|---|--|---|--|--|
| FDA Indication (adults) | | BMI ≥ 30 or BMI ≥ 27 with weight-related condition (e.g. HTN, DM) + reduced-caloric intake and increased physical activity | | | | |
| Pediatrics | Lack safety & effectiveness < 16 years | ≥ 12 years & BMI ≥ 95 th percentile | Not recommended < 18 years | ≥ 12 years & BMI ≥ 30 & weight > 60kg | ≥ 12 years & BMI ≥ 95 th percentile | |
| Dosing | Once daily oral | Once daily oral | Titrate up to 2 tabs BID | Daily SC | Weekly SC | |
| Efficacy (weight loss - placebo) | 6% at 20 weeks | <mark>9%</mark> at 52 weeks | 5% at 52 weeks | <mark>6%</mark> at 52 weeks | 12.5% at 68 weeks | |
| Cardio- vascular | ↓ BP with weight loss; ↑ HR > in peds | ↓ BP with weight loss; Transient ↑ HR [PMID: 24621808] | No ↑ in CV events or MACE [PMID: 33847068] | ↓ CVD events and mortality a lower doses in type 2 DM | | |

Contraindications / Precautions

| | Phentermine up to 12 weeks | Phentermine/ topiramate (Qsymia™) | Naltrexone/ bupropion (Contrave™) | Liraglutide (Saxenda™) | Semaglutide (Wegovy™) |
|---|---|---|---|---|--------------------------------------|
| eGFR < 15ml/min | | Do not use | | No dose reduction required but use with caution due to reports of kidney injury and worsening renal failure History of medullary thyroid cancer or type 2 multiple endocrine neoplasia syndrome | |
| eGFR 15-30 ml/min | | Reduce dose | | | |
| Xindications Pregnancy / breast feeding + | CAD, uncon- trolled HTN, arrhythmia, hyperthyroidism glaucoma | Same as phentermine + hx of renal stones; potential pregnancy | Uncontrolled HTN, seizures, bipolar disorder, anorexia, alcoholism | | |
| Drug interactions (not exhaustive) | MAOIs; SSRI/SNRIs | MAOIs; SSRI/SNRIs; CNS depressants; diuretics | MAOIs; SSRI/SNRIs; opioids; many cyp450 interactions | Beta blockers; drugs associated with hypo/hyperglycemia | |
| Adverse Effects | Anxiety, irritability, insomnia, xerostomia, 个HR, | Same as phentermine + depression, dysgeusia, CNS effects | N/V, diarrhea, headache, insomnia, mania, seizures, xero- stomia, ↑ BP | | n, constipation, epsia, headache, |

Anti-Obesity Medication Cost (WAC, 2023)



* Up to date news for the Pharmaceutical and Biotechnology industries

HOME M&A AI PODCASTS NEWS▼ INSIGHTS▼ PRICING, POLICY, REGULATION▼ THERAPY AREAS▼ CONFERENCES▼

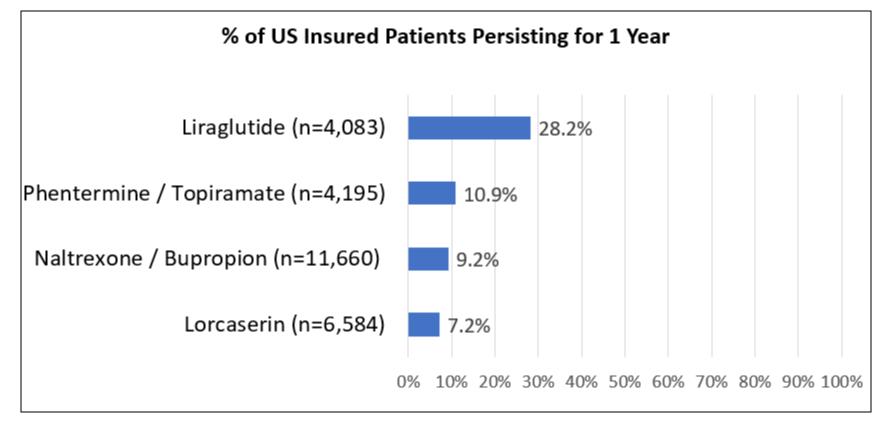
YOU ARE HERE 🝳 HOME > PHARMACEUTICAL

Pricing watchdog judges Wegovy too pricey in the USA



Persistence with Anti-Obesity Medication

Adapted from Ganguly R et al. Diab Res and Clin Pract 2018



Data source: Truven Health MarketScan claims, representing US commercial and Medicare plans. Study period was Jan. 2014- Sept. 2016. PMID 30009937.

Anti-Obesity Medication: Barriers

- Difficult topic for providers and patients to discuss
- Maintaining weight loss is challenging
- Obesity drugs have a clouded history
- Bias and stigma
- Provider education
- Treatment complexity
- Insurance coverage
- Disparity \rightarrow equity

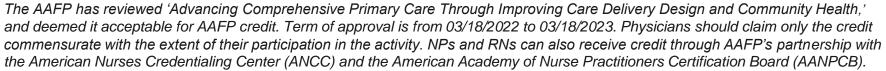




CME Credits & Eval

Reminder to please complete the evaluation in order to claim CME credits!

Claim CME credits here: <u>https://www.surveymonkey.com/r/ZDZS5HG</u>







THANK YOU



3/9/2023

Prepared by Care Transformation Collaborative of RI