Comprehensive Obesity Management Part 2: Ongoing Assessment and Individualization of the Treatment Plan

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KEY TAKEAWAYS

- Given the complex nature of obesity, especially individual variability to treatment, it is important to assess clinical response to therapy and modify treatment plans regularly, as needed, to achieve therapeutic goals.
- Engage the entire healthcare team in the education and follow-up schedule for patients taking obesity medications to ensure effective management and continuity of care.
- Considerations when selecting, titrating, or changing an obesity medication include evaluating adverse effects and changes in other symptoms or comorbidities and the desired percentage weight loss to achieve clinical improvements.
- Common adverse effects for incretin-based obesity medications include nausea, constipation, diarrhea, and vomiting. One of the common reasons patients discontinue therapies is adverse effects. When a patient is not tolerating a dose escalation, reduce the dose or maintain the current dose to allow the patient's body to adapt to the medication. Education on effective mitigation strategies, such as eating smaller meals, will improve patient adherence to obesity medications.
- As the patient loses weight, it may be necessary to adjust doses of other therapies, such as those for diabetes or hypertension.
- Ensure patients have access to resources to support them and their treatment plan. A registered dietitian nutritionist (RDN), if available, can play a pivotal role in supporting the patient to modify behaviors, manage adverse effects, and address nutrition and hydration needs.
- Encourage patients to eat adequate protein and integrate resistance training into their lifestyle to reduce the loss of lean body mass during the weight loss process.
- Continue to set the expectation for consistent, long-term follow-up to individualize the plan to achieve the best possible outcomes.

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INTRODUCTION

The management of obesity is experiencing a transformation, both in definition and treatment options. Recent guidelines and recommendations[1-3] have expanded the thinking on the diagnosis of obesity beyond body mass index (BMI). In addition to BMI, *The Lancet* Commission recommends confirming an obesity diagnosis by measuring excess fat through another anthropometric measurement, for example, waist circumference, waist-to-height ratio, or waist-to-hip ratio, or direct body fat measurement (eg, dual x-ray absorptiometry or bioimpedance), along with the presence of obesity-related signs, symptoms, blood tests demonstrating organ dysfunction, or limitations of daily activities.[1]

The growth in pharmacotherapy options for the treatment of obesity has contributed to this transformation.[4-11] Clinically meaningful weight loss can be achieved with newer incretin-based obesity medications ranging from approximately 15% to 21%.[5,7] These therapies present primary care practitioners (PCPs) with more options to tailor comprehensive obesity treatment plans to an individual's preferences and comorbidities and to optimize treatment response.[12-14]

Obesity has been recognized as a disease,[14,15] and comprehensive obesity management should follow the same principles as other chronic diseases where treatment goals determine appropriate interventions. Individualized, patient-centered treatment plans should consider complications and comorbidities and include use of obesity medications, when indicated, to improve treatment response.[12,13] Understanding prior weight loss experiences[13,16] and engaging patients in treatment decisions is crucial to success. Weight loss and maintenance both require ongoing re-assessment and modifications of the treatment plan.[13,17] PCPs have a pivotal role in managing obesity with evidence-based interventions.

The article *Comprehensive Obesity Management Part 1* in this same issue focused on the initial evaluation and diagnosis of obesity. *Part 2* presents an overview of how to escalate, de-escalate, or change obesity medications, when to schedule follow-up visits, how to address adverse effects to increase patient adherence to treatment plans, which considerations for nutrition and physical activity changes will improve treatment outcomes, and most importantly, how to keep patients engaged for the long-term. The 5As framework (ask, assess, advise, agree, and assist) will be demonstrated through a case discussion on the key principles of engaging patients while on obesity medications. Evidence suggests the 5As framework is helpful to guide discussions with patients.[18,19] We will continue the case study of patient SB from *Part 1* to illustrate how to address management considerations as follow-up continues.

CASE STUDY

SB is a 55-year-old postmenopausal woman with a history of obstructive sleep apnea (OSA), high blood pressure, and obesity (BMI of 30 with waist circumference >88 cm [34.6 inches], confirming excess body fat). She returned 1 month after her first visit for a follow-up visit after starting on tirzepatide 2.5 mg subcutaneously once weekly. At her last visit, her blood pressure medication was changed from metoprolol to lisinopril. SB was encouraged to use her continuous positive airway pressure (CPAP) machine, received instruction on how to take her obesity and new blood pressure medication, and was referred to both a registered dietitian nutritionist (RDN) and to a sleep clinic.

At her 4-week follow-up appointment:

- ***ASK:*** Gather information from SB on how she is doing with her plan. SB reports she is taking the medication as prescribed and has re-started using her CPAP machine at night. She reports sleeping more hours each night and experiencing less daytime sleepiness. SB has her sleep study scheduled for next week. SB noted that she experienced mild nausea over the first 2 weeks of administration, which lessened after seeing the RDN, who recommended nutritional changes. She also reports her appetite has decreased.
- ***ASSESS:*** Evaluate clinically how SB is doing. Assessment reveals normal blood pressure and weight loss of 3.5 lbs (2% of body weight), which is appropriate at 4-week follow-up.
- ***ADVISE:*** Tell SB that she is doing well and encourage her to continue to focus on healthy lifestyle behaviors. SB will increase tirzepatide to the next dose of 5 mg. Encourage SB to drink fluids throughout the day and eat smaller, low-fat meals to mitigate nausea (**TABLE 1**).
- ***AGREE:*** Gain agreement on plan. SB will increase the dose of obesity medication, utilize nutrition strategies discussed to manage nausea, and continue with CPAP machine until her sleep study.
- ***ASSIST:*** Share resources on nausea and schedule a follow-up appointment with the RDN to continue to support SB in mitigating adverse effects and making high-quality food choices. Schedule follow-up in 1 month.

DEVELOPING THE PRACTICE OF REGULAR FOLLOW-UP FOR COMPREHENSIVE OBESITY MANAGEMENT

A team approach can be helpful when integrating pharmacotherapy into comprehensive obesity management; this ensures consistent follow-up with patients to individualize therapy. Leverage available office staff, such as a scheduler, dietitian, nurse, and/or pharmacist within your practice to ensure delivery of effective care in collaboration with patients. **TABLE 2** provides examples of visit scheduling and timing, key considerations for modifying medication dosage or addressing adverse effects, and components of care and education.[12,19,20] Also, see references 3 and 21 for helpful office procedures and guidance as you establish the practice of utilizing pharmacotherapies in your delivery of comprehensive obesity management. As you increase utilization of obesity medications, consider establishing protocols for initiating and titrating medications. Utilize other health professionals within your practice to support obesity medication management using established protocols[22,23] and share resources, including mobile app recommendations, to support lifestyle changes.

Advancing and adjusting obesity medications

The purpose of this section is to review key considerations as you individualize obesity medications and treatment plans to deliver comprehensive obesity management. Critical aspects of advancing and adjusting obesity medications include frequency of follow-up, monitoring the response to therapy and making changes as needed, and addressing adverse effects and lifestyle behaviors required to support the treatment plan.

Once initiated, regular follow-up (**TABLE 2**) is necessary to monitor the response to obesity medications.[12,19,20] Short interval follow up, about 2 to 4 weeks after initiation, either in-person or via telehealth, is recommended to assess tolerance, such as existence of adverse effects, and determine whether changes in the treatment plan are required to achieve the desired health outcome.

Schedule ongoing visits every month for the first 3 months or longer if you continue to titrate medication. Once a therapeutic dose has been achieved, schedule ongoing follow-up visits (approximately every 3 months) for clinical discussion,[20] checking vital signs, and determining response to weight-loss medication. Establish a protocol in your practice on the follow-up schedule and team roles related to follow-up visits. Visits could be completed via telehealth and/or with the use of other professionals within the practice by employing agreed-upon protocols.

During visits, assess weight loss progress; biometrics, such as blood pressure, glucose, and lipids; complications; comorbidities; adverse effects; psychosocial changes; and lifestyle behaviors including nutrition and physical activity.[12,19] Ensure adequate protein intake to maintain muscle mass.[19] Based on assessment, make treatment decisions, including changes to medications for obesity and/or other comorbidities.

Obesity medication: Escalation, de-escalation, or changes in medication type

Most Prescribing Information recommends gradual dose escalation. The goal is to titrate to a dose that achieves weight loss goals and is tolerable for the patient.[24] The dosage should be individualized; keep in mind the highest dose may not be the optimal dose for every patient.[12,19] Some criteria to consider in your treatment decisions include[19,24]

- Keep dose the same if the patient is experiencing adverse effects and your assessment suggests they are not ready for dose escalation. This will give their body time to adjust.
- Increase the dose (if not yet at maximum dose) if the patient is tolerating obesity medication and has not achieved weight loss goals to attain the desired health outcomes.
- Consider switching medications or initiating combination therapy if current obesity medication is not achieving desired weight loss goals, for example, <5% weight loss after 3 months at the highest obesity medication dosage, adverse effects are unmanageable, or if the patient is regaining weight.

TABLE 1. Nutrition management of gastrointestinal adverse effects.[12]

Medication adverse effect	Nutrition management strategies
Nausea	Eat regularly with smaller portions than usual
	Eat slowly
	Stop at first signs of fullness
	Limit high-fat or spicy foods
	Stay hydrated: daily fluid intake of 64 oz
	Limit consumption of sweetened beverages
Constipation	Maintain high-fiber diet of vegetables, fruits, and whole grains
	Stay hydrated: daily fluid intake of 64 oz
	Increase physical activity; reduce sedentary behavior
	Think about adding daily magnesium (250 mg-1500 mg)
	Consider a stool softener or polyethylene glycol (PEG)
Diarrhea	Avoid sugar alcohols
	Limit intake of coffee, dairy, alcohol, and carbonated beverages
	Increase fiber intake
	Stay hydrated: daily fluid intake of 64 oz

Identifying and addressing common adverse effects

Educate patients on possible adverse effects to watch out for when obesity medications are initiated and during regular follow-up visits. Emphasize that mild to moderate adverse effects are common, primarily occurring during dose escalation, and often subside over time.[24] This is essential for 2 reasons. The first is that patients may not be forthcoming in reporting adverse effects for fear of discontinuation of treatment.[12] The second reason is research findings suggest that adverse effects are a main reason for discontinuation of treatment.[25]

The most common adverse effects for incretin-based therapies (such as liraglutide, semaglutide, and tirzepatide) are nausea, vomiting, diarrhea, and constipation.[19,24] These adverse effects are dose dependent. Constipation, however, may not be transient and could last longer than other gastrointestinal symptoms.[5,26]

Once adverse effects are identified, advise patients on how to alleviate symptoms.[12,19,24] **TABLE 1** provides strategies to address nausea, constipation, and diarrhea.[12] Eating smaller meals, limiting high-fat and spicy foods, hydrating adequately, and moderating intake of alcohol and sweetened beverages are all helpful strategies for addressing adverse effects.

TABLE 2. Treatment schedule when prescribing obesity medication.[12,19,20]

Visit type	Considerations	Care team responsibilities
Initial visit (20-40+ minutes)	• Potential adverse effects or drug-drug interactions • Other medical conditions to consider when selecting obesity medication • Desired outcomes of treatment plan • Patient preferences for administration/ timing • Cost and insurance coverage	• Prescribe and counsel on medication timing, frequency, and dose • Discuss potential adverse effects and alleviation strategies • Teach administration of medication, if injectable • Set expectation for follow-up appointments for dose escalation and treatment planning • Provide brief counseling on foundational behaviors such as nutrition, physical activity (including strength training), and hydration • Refer patient to RDN or other professionals for support
Ongoing visits (in-person or virtual) 15-20 minutes monthly for 3 months by a member of the care team. Later, when no longer titrating medication, schedule visits for approximately every 3 months. Frequency of visits can be reduced after the first year	• Tolerance, appetite, and weight loss • Medication adherence • Education and support as needed to help patient maintain diet quality and continue physical activity (including resistance training)	• Titrate obesity medication to next dose, if tolerated and needed • Assess and address any adverse effects • Reinforce lifestyle behaviors and the importance of hydration • Educate on weight loss, weight plateaus, and weight maintenance, as appropriate • Make referrals as needed for ongoing support and education

Improving nutritional intake and preserving lean body mass

Obesity medications like semaglutide and tirzepatide act to reduce appetite and hunger and increase satiety, which leads to lower caloric intake.[19,27,28] As a result, it is necessary to assess patients' food choices to ensure adequate nutrient intake. Eating high-quality foods is a key strategy in all treatment plans. Encourage patients to eat high-fiber foods, such as fruits, vegetables, whole grains, and lentils; high-quality proteins, including eggs, lean meats, poultry, and seafood (up to 1.5 g per kg of body weight per day)[20]; high-quality fats, like those found in nuts and seeds; and low-fat dairy. Also encourage patients receiving obesity medications to drink adequate fluids with a target of 2 to 3 L (68-100 fluid oz) per day.[19]

Referral to an RDN is recommended to support adequate nutrition intake when food intake is decreased and to mitigate potential adverse effects.[12] The RDN can further evaluate whether the patient is developing healthful eating patterns that meet their energy, macronutrient, micronutrient, fiber, and fluid needs.[12,19] If no RDN is available, share resources and mobile apps for support.

In addition to nutrition, discuss physical activity, including strength training to reduce lean body mass loss. Weight loss, regardless of rate, leads to loss of both fat and lean mass.[19] While more research is needed on strategies to minimize the loss of lean mass, initial research findings suggest that resistance exercise can preserve lean mass during weight loss.[29]

CASE STUDY (CONTINUED)

At SB's first follow-up visit, her tirzepatide dose was increased to 5 mg. SB completed monthly visits over the next 5 months. During that time, her dose was increased to 7.5 mg and finally to 10 mg. SB is now returning for her 6-month visit.

- ***ASK:*** Discuss how she is doing. SB states that she is getting more sleep and making higher-quality food choices. She reports she feels good about the weight she has lost, and her clothes are fitting more loosely. She completed her sleep study, and as a result, the CPAP pressure has been reduced. The sleep clinic also recommended a support group. She has attended twice and received an alternative mask interface that has helped her use the CPAP machine more effectively. Her nausea resolved with the nutrition strategies recommended, and she notes she has been working with the RDN to address constipation, a prolonged adverse effect. She bought a few weights and is doing free, online, twice-weekly strength training classes at home to preserve muscle mass. She tracked her protein intake at the recommendation of the RDN and learned she was not eating adequate protein.
- ***ASSESS:*** Evaluate progress. SB's weight has decreased by 12% over 6 months. Her blood pressure has

decreased to recommended levels due to diet, activity changes, and weight loss.

- ***ADVISE:*** Encourage SB to maintain tirzepatide dosage at 10 mg. Many patients do not need to reach maximum dosage to achieve benefit. Given changes in blood pressure, advise SB to stop taking her blood pressure medication (lisinopril). Review strategies for constipation, such as exercise and adequate water intake (**TABLE 1**). SB may also consider taking a stool softener.
- ***AGREE:*** Gain agreement with the plan prior to SB departing the office.
- ***ASSIST:*** Schedule SB to return for her next visit for a blood pressure check in 2 weeks and return for a full office visit in 3 months. Share an educational handout on constipation. Encourage SB to continue her strength training, seek support from the RDN, and attend the OSA support group.

Comprehensive obesity management requires lifelong care

Obesity management requires long-term, individualized treatment. Regaining weight is common following termination of any weight loss intervention.[30,31] Long-term weight loss maintenance with obesity medications requires more research. A retrospective observational study with 4.4 years of follow-up data observed an average weight loss of 10.4%.[14] More than half of patients were on ≥2 obesity medications at their final visit. Phase 3 trials of obesity medications demonstrated sustained clinically meaningful weight loss with obesity medication compared to placebo.[32-35] Individuals with both obesity and prediabetes who received long-term treatment with tirzepatide achieved a mean bodyweight reduction of up to 20% and had lower progression to type 2 diabetes vs placebo.[35] Semaglutide use at 4 years improved weight and anthropometrics compared with placebo and was associated with fewer cardiovascular events in individuals with overweight or obesity and preexisting cardiovascular disease.[34] More long-term, real-world studies are needed to understand medication adherence and health outcomes.

As with any chronic disease, once medications are stopped, the benefits diminish. If hypertension medications are stopped, blood pressure increases. Similarly, if obesity medications are stopped, two-thirds of the weight lost is often re-gained over the following year.[5,13,36] However, for most patients, as with any chronic disease, there is heterogeneity in response. Long-term use of obesity medications along with lifestyle counseling is required to sustain healthier weight for most patients. Research suggests that incorporating exercise, especially resistance training, with obesity medications helps improve weight loss maintenance and body composition during treatment and after termination of pharmacotherapy.[36] Lifestyle behaviors are foundational to weight loss maintenance.

SUMMARY

Overweight and obesity are common diagnoses in primary care and require individualized treatment plans for each patient. Once clinical obesity is diagnosed, a comprehensive approach can be initiated using foundational lifestyle interventions, such as nutrition, physical activity, stress management, and sleep along with pharmacotherapy and/or metabolic bariatric surgery when indicated. Treatment plans should align with the patient's goals and preferences.

Many patients are aware of and interested in obesity medications, and many have concerns about adverse effects and long-term risks; therefore, it is important to address barriers prior to initiation.[37] Once medication is initiated, continue to educate patients on the adverse effects of obesity medications and potential mitigation strategies to improve adherence. Obesity medications are efficacious, and when prescribed, require consistent follow-up care to ensure patients achieve sustainable outcomes. Check in regularly with patients to prevent potential barriers to adherence. Engage others on the healthcare team to provide ongoing support between visits to ensure continuity of care. Obesity management requires lifelong care, including ongoing individualization, to achieve the best possible outcomes. ●

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