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A working paradigm for the treatment of obesity in gastrointestinal practice

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ABSTRACT

Obesity is a chronic, relapsing, multifactorial disease characterized by abnormal or excessive adipose tissue accumulation that may impair health and increase disease risks. Despite the ever-increasing prevalence and economic and societal burden, the current approaches to treat obesity are not standardized or generally effective. In this article, we describe a current working paradigm developed by a consensus approach for the multidisciplinary treatment of obesity in the gastrointestinal practice. Obesity should be managed as a continuum of care focusing on weight loss, weight loss maintenance, and prevention of weight regain. This approach needs to be disseminated throughout the health care system, coordinated by a multidisciplinary team, and include gastroenterologists who are in a unique position to address obesity. Gastroenterologists are in the front line of managing the morbidity resulting from obesity, and have expertise in use of the essential tools to manage obesity such as nutrition, pharmacology, endoscopy, and surgery.

1. Introduction

Obesity is a multifactorial disorder based on genetics, biological, microbial, and environmental factors that promote a positive energy balance mainly driven by an increased food intake and decreased energy expenditure [1,2] that lead to excess weight gain, adiposity, and increased risk of diseases [3], including cardiovascular disease [4]; type 2 diabetes mellitus [5]; sleep apnea [6–9]; cancer [10]; reproductive disorders [11]; endocrine disorders [12]; psychologic disorders [13–16]; bone, joint, and connective-tissue disorders [17,18]; and gastrointestinal (GI) disorders [19]. In fact, obesity is associated with the top 10 causes of death and with comorbidities before death [20]. Treating obesity decreases mortality and improves the associated comorbidities.

In this article, we describe a recently proposed working paradigm for the treatment of obesity in the GI practice. Obesity should be managed as a continuum of care focusing on weight loss, weight loss maintenance, and prevention of weight regain. This continuum of care should be coordinated by a multidisciplinary team that includes gastroenterologists because of their expertise in nutrition, pharmacology, endoscopy, and surgery.

2. Step 1: Define the treatment goal

Once the patient is ready to be treated for obesity, a management program should focus on 3 main goals and they are (1) weight loss, (2) weight loss maintenance, and (3) prevention of weight loss regain. Each stage of obesity management needs to be addressed separately and all the stages are equally important. Thus, maintenance of weight loss, and prevention of weight regain after initial successful weight loss (avoiding the yo-yo effect) are essential aspects of ongoing care [21]. In the weight loss phase, the goals should be realistic and based on the evidence of health benefits associated with the degree of weight loss, rather than focusing on cosmetic improvements. An initial and a realistic weight loss goal should be moderate; the usual recommendation is 5%-10% reduction in total body weight. Losing 5%-10% is sufficient to have a significant improvement on insulin resistance, hypertension, fatty liver, weight-bearing joint arthritis, obstructive sleep apnea, and all cardiovascular risks factors with exception of serum low-density lipoprotein levels [22,23]. In addition, losing more that 15% total body weight is associated with a reduction of

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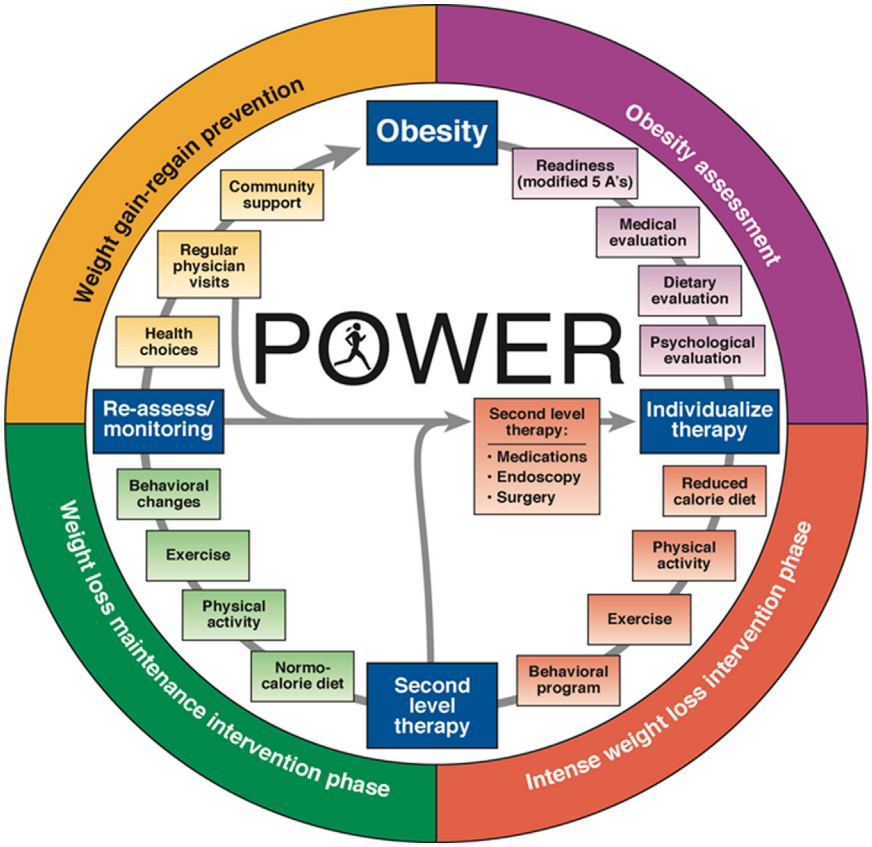

Fig. 1. POWER: practice guide on obesity and weight management, education, and resources. (Adapted with permision from Ref. Acosta et al [21]).

cardiovascular mortality and morbidity [24]. Thus, multidisciplinary obesity management programs should aim for higher initial weight loss. Subsequently, similar emphasis should be given to maintain the weight loss achieved and to avoid rapid weight regain. Finally, when patients have successfully lost weight and maintained the new weight level for over a year, follow-up and education should be maintained consistently to avoid weight regain (Figure 1) [21].

3. Selection of therapy in patients with obesity

The selection of therapy for the patients with obesity should be accomplished by a multidisciplinary team, in which physicians' partner with other professionals to provide a comprehensive assessment and intervention. The physician typically has training in obesity medicine or is a gastroenterologist with expertise in nutrition, and the team includes a bariatric surgeon, a mid-level provider (physician assistant, nurse practitioner, or nurse), a registered dietitian nutritionist, a behavioral therapist (eg, psychiatric social worker, psychiatrist, or psychologist), a physical therapist and medical assistants. From the initial contact with the patient and through the continuum of care, the team, including ancillary staff, should embrace obesity as a chronic medical problem, deal respectfully, and foster motivation and inspiration to achieve the proposed goals.

There are typically 2 different scenarios when approaching a patient with obesity: the patient may specifically be referred or seek care for obesity; alternatively, the patient with obesity presents with another medical condition. In the latter scenario, the physician needs to decide whether it is appropriate to embark on discussion of obesity during that visit and assess patient's readiness to embark on a weight management program. If the patient is not ready for such a commitment, the subject should be not forced to do so.

The recommendation not to embark on a weight management program is predicated on the practical notion that it is essential for gastroenterologists who see many patients with obesity-related comorbidities, such as non-alcoholic fatty liver disease, reflux esophagitis, gallbladder disease, pancreatitis, and colon cancer, and cannot pursue obesity management in patients who are not committed to do so.

If the patient is ready to discuss their obesity, the 2013 American Heart Association (AHA)/American College of Cardiology (ACC)/The Obesity Society (TOS) guideline for the management of overweight and obesity in adults recommends that the clinician partner with the patient to assess whether the patient is ready to undertake the measures necessary to achieve weight loss before beginning comprehensive counseling efforts [25]. The 5 As (Ask, Advise, Assess, Assist, and Arrange), originally developed for smoking cessation, serve as an effective tool for obesity counseling [26]. Motivational interviewing using open-ended questions, affirmation, reflections, and summaries is another useful tool [27,28].

The next essential step is to introduce the phases and expectations of the weight management program (refer goals earlier). The physician or other members of the team evaluate several personal factors for the individual patient that include dietary patterns, physical activity, abnormal behaviors and psychosocial concerns, medical comorbidities, secondary causes of weight gain, potential barriers to weight loss, prior attempts at weight loss and weight gain, current medications, family history, and comorbidities such as cardiovascular disease, diabetes (eg, by urinalysis or finger stick blood glucose) and obstructive sleep apnea (using validated sleep apnea questionnaires or the sleep apnea clinical