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Letter to the Editor

A new agent for ideal weight management before abdominal hernia surgery: Semaglutide injection

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Dear Editor,

In recent years, due to the rising prevalence of obesity, various strategies have been developed to manage obesity-related conditions. Abdominal hernia surgery holds particular significance in this context, given the prominent role of obesity in its etiology and the challenges associated with surgical management (1).

Preoperative optimization of body mass index (BMI) is recommended in elective abdominal hernia repair. According to the European Hernia Society, a BMI <35 kg/m^2 should be targeted to reduce the risk of wound-related complications and hernia recurrence (2). Studies have demonstrated that preoperative BMI reduction lowers surgery-related complication rates and improves postoperative outcomes. Although a wide range of strategies have been proposed—ranging from dietary interventions to bariatric surgery—no universally accepted protocol has been established (3).

While a definitive BMI threshold for abdominal hernia surgery has not been clearly defined, Mabeza et al. reported that perioperative morbidity increases significantly when BMI exceeds 32 kg/m^2 (4). General thresholds for bariatric surgery are BMI >40 kg/m^2 or >35 kg/m^2 with comorbidities (5). Consequently, for patients who fall below these thresholds, are not candidates for bariatric surgery, or have failed conservative treatments, alternative weight loss options are needed.

Glucagon-like peptide-1 (GLP-1) receptor agonists, originally developed for type 2 diabetes mellitus, have emerged as promising agents for weight reduction. Following the success of liraglutide (a once-daily injectable), semaglutide was developed, offering a longer half-life and once-weekly subcutaneous administration (6). Semaglutide is generally well tolerated; however, gastrointestinal side effects such as nausea, vomiting, diarrhea, and constipation are commonly reported, especially during the initial dose-escalation phase. These symptoms are usually transient but can lead to treatment discontinuation in some patients. Additionally, semaglutide has been associated with an increased risk of gallbladder-related disorders, and rare cases of acute pancreatitis and acute kidney injury have been reported. Proper dose titration and individualized risk assessment are essential, particularly in surgical candidates (7).

Given the complexities obesity introduces into hernia surgery, achieving optimal preoperative weight is essential for improved outcomes. A multidisciplinary approach—including input from a dietitian, endocrinologist, and general surgeon—is recommended. Institutional protocols should be adapted

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accordingly. For patients unsuitable for bariatric surgery, semaglutide represents a potential alternative in preoperative weight optimization.

However, data remain limited regarding the impact of semaglutide use prior to abdominal hernia surgery on long-term surgical outcomes and recurrence rates. This highlights the need for prospective studies comparing preoperative weight loss strategies in obese hernia patients, with semaglutide as a key investigational option.

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