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Is treating the valve enough? Obesity treatment in patients undergoing transcatheter aortic valve implantation

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Introduction: Obesity can influence the choice of transcatheter aortic valve implantation (TAVI) over surgery.[1] Does it also prompt treatment? We examined weight change and use of glucagon-like peptide-1 receptor agonists (GLP-1RAs) in patients with obesity undergoing TAVI

Patients and Methods: We retrospectively studied 244 patients with body mass index (BMI) ≥30 kg/m² undergoing TAVI between 23 February 2022 and 27 May 2026, with ≥3 calendar months of follow-up. Assessments included procedural selection, weight, Katz scores and treatment uptake. Hypothetical projections used 68-week semaglutide 2.4 mg weekly trial averages with lifestyle intervention: 14.9% weight loss without diabetes and 9.6% with diabetes

Results: Obesity influenced the choice of intervention in 41/244 patients (16.8%): it was the contributing factor for choosing TAVI over surgery in 23 (9.4%) and a main reason in 18 (7.4%). Of the 23, ten gained weight and seven started GLP-1RA therapy. Mean age was 77.4±6.3 years, BMI 34.4±4.1 kg/m² and median follow-up 626 days; 138/227 patients (60.8%) had Katz scores <6. Among 221 with paired weights at variable intervals, 112 (50.7%) gained weight, 88 (39.8%) lost weight and 21 (9.5%) remained within ±0.1 kg. Mean BMI was 34.52 at baseline and 34.55 at follow-up; 213 (96.4%) remained obese. Weight loss ≥5% occurred in 17 (7.7%) and gain ≥5% in 21 (9.5%). Only 17/244 patients (7.0%) received GLP-1RAs. Of 38 patients offered therapy, 16 (42.1%) started treatment. Among 22 who did not start, 16 cited cost or reimbursement, five declined and one had contraindications or adverse effects. Applying trial averages to the 21 with cost or refusal barriers yielded a hypothetical mean weight loss of 13.2 kg and BMI reduction from 40.3 to 35.3 kg/m².

Conclusion: If obesity helps determine the valve intervention, its treatment should not remain an afterthought. Assessment for GLP-1RA therapy should be integral to care before and after TAVI, with treatment tailored to eligibility, nutrition and functional status. Clinical benefit requires prospective evaluation.

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LITERATURE

1. Wilding JPH, Batterham RL, Calanna S, Davies M, Van Gaal LF, Lingvay I, et al; STEP 1 Study Group. Once-Weekly Semaglutide in Adults with Overweight or Obesity. N Engl J Med. 2021 Mar 18;384(11):989-1002. https://doi.org/10.1056/NEJMoa2032183