Glucose Tolerance Test Before and After Gastropasty. Is It a Secure Measurement?

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Dear Editor,

To date, many articles have focused on the impact of restrictive bariatric operations on diabetes mellitus control. In some of these studies, the authors used glucose tolerance tests before and after the bariatric operation to prove better postoperative glucose tolerance [1, 2]. However, while reviewing such studies, questions arise regarding the reliability of the glucose tolerance test after a bariatric operation as a measure of diabetes mellitus control.

In our department, many morbidly obese patients undergo restrictive operations, such as sleeve gastrectomy and gastric bypass, and the glucose tolerance test is conducted preoperatively and occasionally postoperatively. After reducing the stomach volume of these patients, much less liquid and solid food can be safely tolerated than was preoperatively. Frequently, after the operation, patients are unable to tolerate and timely ingest the requisite amount of food assumed by the mixed meal glucose tolerance test or the simple glucose tolerance test. Furthermore, gastric bypass has a much more intense restrictive effect than sleeve gastrectomy with respect to the stomach volume of these morbidly obese patients.

In our opinion, the glucose tolerance test is not a safe and efficacious test for measuring diabetes mellitus control post

constrictive bariatric operation. Furthermore, this test is not appropriate for comparing a non-gastrectomy obese patient with a patient who underwent a restrictive gastric operation. We also believe that it is not prudent to compare the glucose metabolism by this way before and after the restrictive operation on the same morbidly obese patient. In the aforementioned cases, we submit that the glucose tolerance test is not reliable.

Conflict of Interest The authors declare no conflict of interest.

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