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LETTER TO THE EDITOR

Gastric Emptying After Sleeve Gastrectomy

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To the editors:

We read with interest the article published by Dr. Hedberg and colleagues [1]. Although the authors are to be commended for their aim to evaluate the effect of BPD-DS on postoperative gastric emptying time and PYY changes, there are some concerns with the study design. In particular, although the results are well analysed, the study is not designed appropriately. Abnormal gastric emptying in the obese has been suggested previously, and conflicting results over the rate of gastric emptying in obese subjects have been reported [2]. Individual studies in obese subjects have variously shown that gastric emptying is delayed, unchanged or accelerated [3, 4]. Under these circumstances, consideration must be given to the multitude of factors that can affect gastric emptying, like age, gender, physical activity levels, meal size, energy density and composition. Additionally, a high inter-individual difference in the gastric emptying of healthy subjects has been reported [5]. In the above-mentioned study, the selection of participants, group comparisons and the different test meals are confounding factors that may influence gastric emptying, and therefore conclusions should be taken with caution.

Furthermore, we would like to address the authors' statement that there are two studies on gastric emptying after sleeve gastrectomy, which refers to Braghetto et al. and Bernstine et al. studies [6, 7]. Our studies on gastric emptying after sleeve gastrectomy (SG) were the first to be published and are cited in both of the previously mentioned studies. Our studies indicated a constant effect of SG in the acceleration of the gastric emptying of solids, which occurs faster postoperatively, both in the short term and in the long term [8, 9]. Accumulating data that agree with our studies has shown that gastric emptying after SG is faster [6, 10–12]. Gastrointestinal transit is involved in the regulation of food intake through multiple neurohormonal pathways. Accelerated gastric emptying after SG contributes to the digestive process by enhancing satiety signals. Therefore, the mechanisms of weight loss and improvement in glucose metabolism that are seen after SG are related not only to gastric restriction but also to neurohormonal changes related to gastric resection and altered gastric emptying. Our data, in addition to the data that have demonstrated effects on gut peptides that are involved in satiety responses, demonstrate a link between the altered motor function of the gut and appetite regulation after SG. With the recent popularity and established efficacy of laparoscopic SG, we believe that our observations are useful.

Conflict of interest The authors declare that they have no conflict of interest.

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