



COMMENT ON BRETHAUER ET AL.

## Bariatric Surgery Improves the Metabolic Profile of Morbidly Obese Patients With Type 1 Diabetes. *Diabetes Care* 2014;37:e51–e52

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We read the article of Brethauer et al. (1) with great interest. Gastric bypass surgery in type 1 diabetes has previously not been well studied except for a small number of case reports. We recently reported on the effects of gastric bypass surgery on severely obese females with type 1 diabetes during short-term follow-up (2). We found significant reductions in both the basal insulin rate as well as bolus insulin dose in multiple daily injections (MDI)-treated patients. In their article, Brethauer et al. described a total of 10 patients but did not specify whether patients were treated with either continuous subcutaneous insulin infusion (CSII) or MDI insulin regimens. This is an important distinction given that CSII regimens have been found to provide better glycemic control with lower total daily insulin requirements

(3). In this group of patients, the baseline HbA<sub>1c</sub> was found to be 10.0% and the observed improvement in HbA<sub>1c</sub> to 8.9% during follow-up, and reduction in daily insulin requirement therefore could be affected by patients converting from MDI to CSII over time. On a similar note, the authors report daily insulin requirements in units/kg/day. This can easily be calculated in MDI-treated patients but is difficult in CSII-treated patients as insulin-to-carbohydrate ratios are used for (variable) meal coverage. If CSII-treated patients were included in the study, how did the authors calculate the daily insulin requirements in these patients? Given the increasing prevalence of obesity, even in patients with type 1 diabetes, elucidating the effects of gastric bypass surgery on severely obese type 1

diabetes patients deserves further investigation.

**Duality of Interest.** No potential conflicts of interest relevant to this article were reported.

### References

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