SHOULD REMISSION OF TYPE 2 DIABETES MELLITUS BE THE FOREMOST GOAL AFTER BARIATRIC SURGERY?

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INTRODUCTION
Remission of type 2 diabetes (T2D) is a yearned outcome after bariatric surgery (BS). Attention to individuals who do not strictly fulfill remission criteria has been frequently left behind. The aim of this study was to evaluate metabolic control status in patients considered as diabetes “non-remitters”.

PATIENTS AND METHODS
Retrospective study of 125 patients (59.2% women) with preoperative diagnosis of T2D who underwent BS in a single center (2006-2011). Anthropometric and metabolic parameters, before surgery and at one-year follow-up.

Definition of T2D remission according to Buse et al: HbA1c<6%, fasting glucose (FG) <100 mg/dL, absence of pharmacologic treatment. Evaluation of metabolic status of non-remitters, according to ADA’s target recommendations of glucose and lipid control: HbA1c < 7%, LDL-c < 100 mg/dL, triglycerides < 150 mg/dL, HDL-c > 40 (male) or > 50 mg/dL (female).

RESULTS
Preoperatively (mean ± SD): age 53.5 ± 9.7 years, BMI 43.5 ± 5.6 kg/m2, duration of T2D 7.7 ± 7.9 years, FG 162.0 ± 56.3 mg/dL, HbA1c 7.7 ± 1.6%, LDL-c 100.9 ± 29.1 mg/dL, HDL-c 48.6 ± 12.3 mg/dL, triglycerides (Tg) 195.7 ± 128.7 mg/dL. 43.2% had previous insulin treatment, 38.4% had HbA1c < 7% and only 9.6% (12 patients) fulfilled ADA’s target recommendations regarding optimal combined metabolic control.

At one year follow-up, 62 (49.6%) patients did not achieve diabetes remission as defined by Buse et al (figure 1a); rates were different according to previous hypoglycemic treatment (figure 1b). Table 1 shows patients’ baseline and 12-months’ follow-up characteristics according to their T2D remission status. Hypoglycemic treatment according to remission status is shown in table 2.

Of the non-remitters, 91.9% had HbA1c <7% (figure 2) and 40.0% achieved ADA’s target recommendations (figure 3). There were no differences between remitters and non-remitters in the number of individuals reaching ADA’s target glucose and lipid levels.

CONCLUSIONS
Although almost 50% of patients may not be classified as diabetes remitters according to a strict criteria, they achieve a significant improvement in glucose and lipid control, which should be considered a success according to most scientific societies’ target recommendations.

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