

Add on Exenatide Treatment in Obese Type 2 Diabetic Patients under Intensive Insulin Regiments

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Objectives:

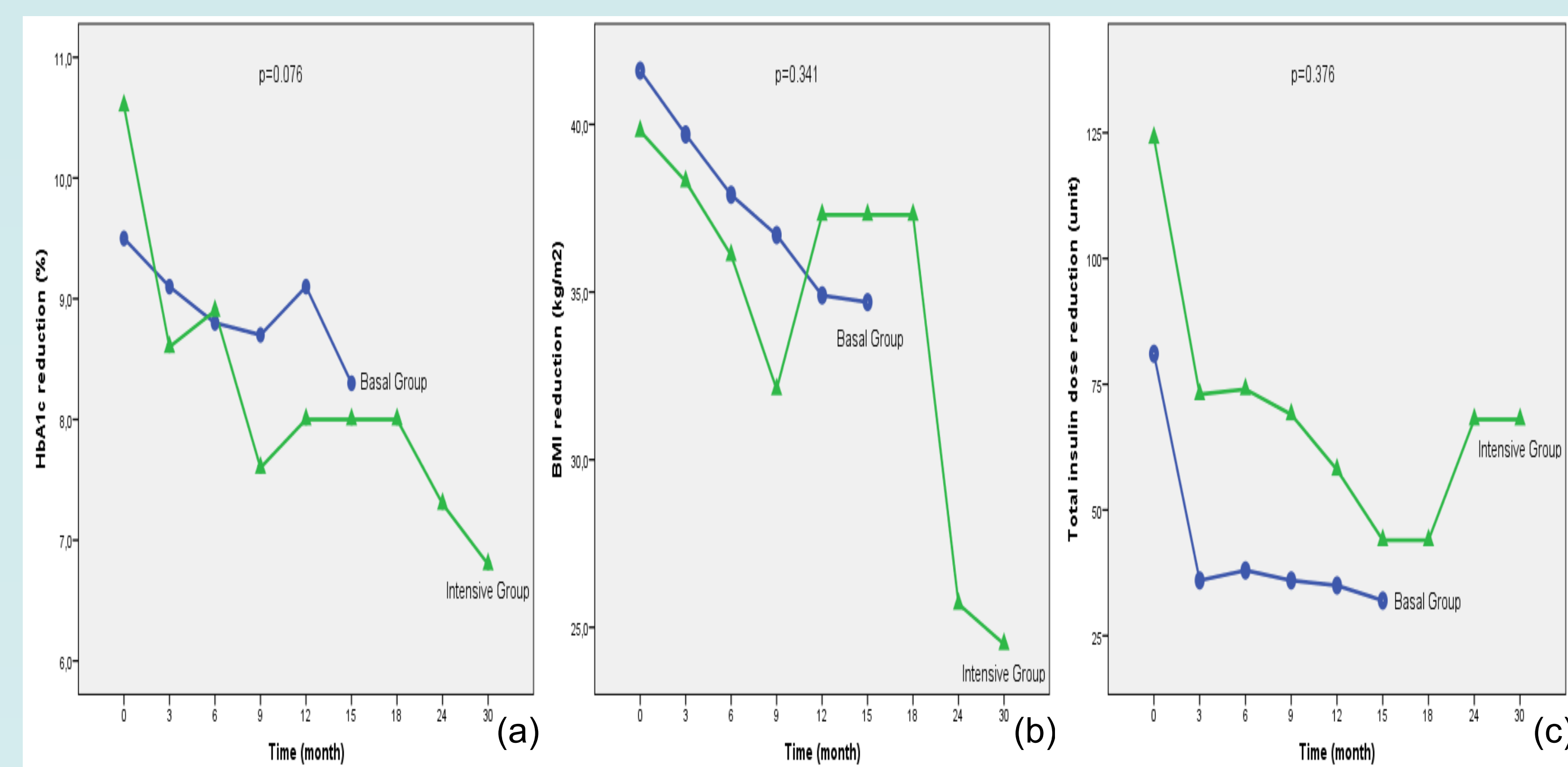
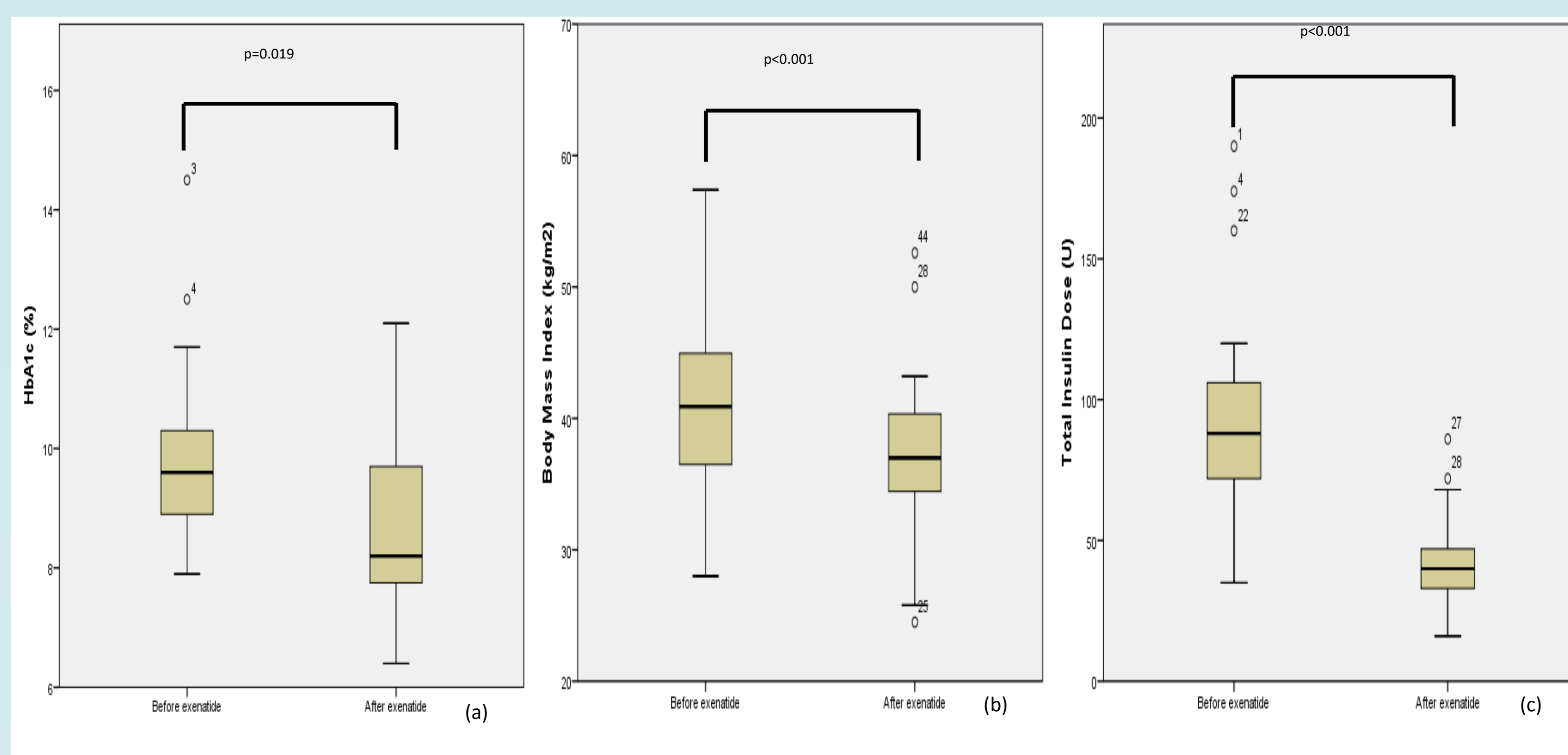
Intensive insulin treatment in morbidly obese patients with Type 2 Diabetes (T2DM) is often difficult. Insulin dosages are much higher, which further increase weight gain and the risk of hypoglycemia. Glucagon Like Peptide 1 receptor agonists (GLP-1RAs) are the promising treatment modalities causing weight loss and reducing the risk of hypoglycemia. There is no published data about the effect of adding on GLP1RAs to morbidly obese T2DM patients with un-controlled glucose levels under intensive insulin regiments.

Methods:

This retrospective case series report the clinical outcomes of 23 morbidly obese patients with uncontrolled T2DM (Female=18, age=59±10.44 years, Body mass index (BMI) 41.12±6.77 years, HbA1c 9.92±1.52), under intensive insulin regiments. Patients were treated with 10 micrograms exenatide twice daily for a mean follow-up period of 11.22±7.01 (3-30) months. Intensive insulin regiments were continued in 7 patients while the other 16 patients were switched to basal insulin during the exenatide treatment. Metformin was the only anti-diabetic medicine taken by all the patients, other than exenatide and insulin.

Results:

During the follow up period, the mean HbA1c levels of the patients were significantly improved (p=0.019) along with the significant decrease in BMI and the reduction in the total insulin dosages (p<0.001 for both). The demographical and clinical characteristics of the patients in the intensive and basal insulin group were similar, other than the baseline insulin dosages before the exenatide treatment, which was significantly higher in the intensive regimen group (p=0.013). When the clinical improvements of the two groups were compared, no significant difference was present between the alterations of HbA1c, BMI and the reduction in total insulin dosages (p=0,098, p=0,617, p=0,3 respectively).



Conclusions:

According to the results of this retrospective case series, add on exenatide appears to be an essential treatment alternative in morbidly obese T2DM patients without glycemic regulation under intensive insulin regiments.

