

# Letter to Editor: Therapeutic Effects of Obesity Surgery on Glucose Control in Patients With Type 2 Diabetes



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## Dear Editor

We read the article published in the “Annals of Bariatric Surgery” by Safari et al [1] entitled “Therapeutic effects of obesity surgery on glucose control in patients with type 2 diabetes” with great interest and found out some main subjects. We praise Dr. Safari et al for bringing attention to the effect of bariatric/metabolic surgery on diabetes indices. The effect of bariatric surgery on metabolic diseases is well known. Although bariatric surgery is very effective in improving insulin resistance, and patients do not have the same response to these surgeries and some patients has no remission [2]. Various tools have been designed to predict patients’ response to bariatric surgery such as pre-operative Diabetes Remission (DiaRem). Park indicated that DiaRem has been validated in an independent external cohort studies and it can be used in routine clinical settings [3]. First, DiaRem score was developed by Still et al using a retrospective study consisting of 690 patients with type 2 diabetes mellitus undergone Roux-en-Y Gastric Bypass (RYGB) [4]. Craig Wood et al in 2018 have used and defined different aspects of DiaRem in a study and revealed that DiaRem can distinguish patients likely and unlikely to develop remission of type 2 diabetes mellitus [5]. The use of fasting blood sugar and HbA1C alone is not suf-

ficient to evaluate and compare different methods of bariatric surgery to improve diabetes, and it is better to use more comprehensive criteria that include the duration of diabetes. Due to the high prevalence of obesity and the high association of obesity and type 2 diabetes mellitus [6], more cases should be used to compare and conclude on the effectiveness of bariatric surgery methods in improving diabetes. It is recommended to use valid tools like DiaRem in this regard.

## References

- [1] Safari S, Samadi Afshar A, Alemrajabi M, Baghai Wadji M, Hashemi Madani N. Therapeutic effects of obesity surgery on glucose control in patients with type 2 diabetes. *Annals of Bariatric Surgery*. 2020; 9(2):1-8. <http://annbsurg.iuums.ac.ir/article-1-274-en.html>
- [2] Koliaki C, Liatis S, le Roux CW, Kokkinos A. The role of bariatric surgery to treat diabetes: Current challenges and perspectives. *BMC Endocrine Disorders*. 2017; 17(1):50. [DOI:10.1186/s12902-017-0202-6] [PMID] [PMCID]
- [3] Park JY. Prediction of type 2 diabetes remission after bariatric or metabolic surgery. *Journal of Obesity & Metabolic Syndrome*. 2018; 27(4):213-22. [DOI:10.7570/jomes.2018.27.4.213] [PMID] [PMCID]

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- [4] Still CD, Wood GC, Benotti P, Petrick AT, Gabrielsen J, Strodel WE, et al. Preoperative prediction of type 2 diabetes remission after Roux-en-Y gastric bypass surgery: A retrospective cohort study. *The lancet Diabetes & endocrinology*. 2014; 2(1):38-45. [DOI:10.1016/S2213-8587(13)70070-6]
- [5] Craig Wood G, Horwitz D, Still CD, Mirshahi T, Benotti P, Parikh M, et al. Performance of the DiaRem score for predicting diabetes remission in two health systems following bariatric surgery procedures in Hispanic and non-Hispanic white patients. *Obesity Surgery*. 2018; 28(1):61-8. [DOI:10.1007/s11695-017-2799-y] [PMID] [PMCID]
- [6] Leitner DR, Frühbeck G, Yumuk V, Schindler K, Micic D, Woodward E, et al. Obesity and type 2 diabetes: Two diseases with a need for combined treatment strategies - EASO can lead the way. *Obesity Facts*. 2017; 10(5):483-92. [DOI:10.1159/000480525] [PMID] [PMCID]