LETTER TO THE EDITOR





Botox or No-Tox?

Baris D. Yildiz 100

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Dear Editor.

We read with great interest the article titled "EUS-Guided Intragastric Injection of Botulinum Toxin A in the Preoperative Treatment of Super-Obese Patients: a Randomized Clinical Trial" [1] with great interest. The authors performed a clinical trial on a very controversial topic but we have several objections.

Firstly, there is obscurity about the number of injections and dosage per injection in the Botox administered group. On page three of the article inside the left hand side column, it is stated that 5 separate injections each with 40 units were injected. But on the right hand side column, it is stated that 12 microinjections containing 10 units were performed. We feel that the authors should clarify this ambiguity.

Secondly, the authors did not inject Botox in fundus of stomach. It is known that gastric fundus plays a role in obesity by gastric accommodation and production of ghrelin. Injection of Botox in fundus would be expected to result in the reduction of gastric capacity and early satiety [2]. Excluding fundus from such a therapeutic intervention aimed at obesity would be incomplete.

Thirdly, this study was done with super-obese patients (i.e., BMI > 50 kg/m^2) awaiting definitive obesity surgery. But in the discussion section, the authors state that "The findings of the present study suggest that the practice should be abandoned." The "practice" mentioned in the sentence is intragastric botox injection for weight loss. We think that the authors cannot reach such an overrated conclusion with a trial

involving only a specific subset of obese patients (i.e., superobese). It is true that methodology of Botox injection and its place in management of obesity is not standardized and needs more randomized trials. But with the findings of this particular trial (i.e., de Moura EGH et al) [1], we cannot reach a conclusion about patients with BMI between 30 and 35 or BMI between 35 and 40, etc. Thus, we cannot rule that Botox should be abandoned for any subset of obesity based on this particular study.

Compliance with Ethical Standards

Conflict of Interest The author declares that there is no conflict of interest.

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References

- de Moura EGH, Ribeiro IB, Frazão MSV, Mestieri LHM, de Moura DTH, Dal Bó CMR, et al. EUS-Guided intragastric injection of botulinum toxin a in the preoperative treatment of super-obese patients: a randomized clinical trial. Obes Surg. 2018. https://doi.org/10.1007/ s11695-018-3470-y.
- Kim DY, Camilleri M, Murray JA, et al. Is there a role for gastric accommodation and satiety in asymptomatic obese people? Obes Res. 2001;9(11):655–61.



Baris D. Yildiz baris104@yahoo.com

General Surgery Department, Ankara Numune Teaching Hospital, Ankara, Turkey