### LETTER TO EDITOR/LED REPLY





# Response to Should sleeve gastrectomy be a preoperative standard in kidney transplant waitlisted patients with a BMI of 35 kg/m<sup>2</sup>

Tomasz Dziodzio<sup>1,2</sup> · Johann Pratschke<sup>1</sup> · Robert Öllinger<sup>1</sup>

Received: 9 June 2022 / Revised: 30 June 2022 / Accepted: 30 June 2022 / Published online: 11 July 2022 © The Author(s) 2022

#### Response

We thank the Polish colleagues for their thoughtful letter and their contribution to the discussion of our publication. We absolutely agree that the body mass index (BMI) is an imperfect method of measuring the severity of obesity in patients with chronic kidney disease. First, it is less accurate than abdominal adiposity, waist circumference, and waist-tohip ratio measurements for assessing obesity-related diseases and complications [1, 2]. Second, obesity assessment using the BMI neglects the patient's body composition and the proportion between (abdominal) fat, fluid, and muscle tissue. While the former is associated with the metabolic syndrome, the latter seems to have a protective effect in dialysis patients and might contribute to the so-called obesity paradox in these patients [3, 4]. However, it is important to note that the data supporting the effects of the obesity paradox are mainly based on BMI measurements. Publications that are more recent question the existence obesity paradox and rather suggest that the hypothesized effects are biased by the imperfection of BMI measurement itself [5, 6]. On the other hand, BMI is a quick and simple tool and can be easily performed by any medical or non-medical personnel. Therefore, there is still a raison d'être for the BMI as a screening tool to identify patients at risk. However, patient identification should be followed by more elaborate obesity measures to qualify patients for further obesity treatment. The development of chronic kidney disease is a lengthy process: years pass between the onset of kidney disease, the need for dialysis, and kidney transplantation. Therefore, it is particularly

important to identify potential patients at an early stage of their disease and offer obesity treatment as early as possible to reduce long-term complications, facilitate access to transplant programs, and improve patient survival and transplant outcomes. It is essential that such programs involve a multidisciplinary team of nurses, physical therapists, dietitians, internists, and bariatric and transplant surgeons. As bariatric surgery remains the only sustainable treatment option for morbid obesity, we believe kidney transplant candidates with a BMI of  $\geq$  35 kg/m<sup>2</sup> should be evaluated for obesity treatment involving bariatric surgery early in the disease. Additionally, prehabilitation and ERAS (enhanced recovery after surgery) programs are becoming more important not only in bariatric surgery but also in kidney transplant candidates and should be implemented in the preparation process to achieve sustainable outcomes [7, 8]. In the coming years, the rate of marginal organs will remain high, and the scarcity of donor organs will prevail. Therefore, a relevant impact on transplant outcomes can be achieved mainly by influencing modifiable factors such as obesity in the recipient. We strongly believe obesity surgery programs bear the potential to overcome the weight stigma in selected kidney transplant candidates. However, it is crucial that such programs undergo prospective, high-quality scientific monitoring and evaluation to demonstrate their true clinical value and evidence in this patient population.

Funding Open Access funding enabled and organized by Projekt DEAL.

## Declarations

**Ethics Approval** This article does not contain any studies with human participants or animals performed by any of the authors.

Informed Consent Informed consent does not apply.

Conflict of Interest The authors declare no competing interests.

Tomasz Dziodzio tomasz.dziodzio@charite.de

<sup>&</sup>lt;sup>1</sup> Department of Surgery–Campus Charité Mitte and Campus Virchow-Klinikum, Charité–Universitätsmedizin Berlin, Augustenburger Platz 1, 13352 Berlin, Germany

<sup>&</sup>lt;sup>2</sup> BIH Charité Clinician Scientist Program, Berlin Institute of Health (BIH), Berlin, Germany

**Open Access** This article is licensed under a Creative Commons Attribution 4.0 International License, which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence, and indicate if changes were made. The images or other third party material in this article are included in the article's Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in the article's Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this licence, visit http://creativecommons.org/licenses/by/4.0/.

# References

- 1. Banks J, Kumari M, Smith JP, et al. What explains the American disadvantage in health compared with the English? The case of diabetes. J Epidemiol Community Health. 2012;66(3):259–64.
- 2. Lee JH, McDonald EO, Harhay MN. Obesity management in kidney transplant candidates: current paradigms and gaps in knowledge. Adv Chronic Kidney Dis. 2021;28(6):528–41.

- Flegal KM, Kit BK, Orpana H, et al. Association of all-cause mortality with overweight and obesity using standard body mass index categories: a systematic review and meta-analysis. JAMA. 2013;309(1):71–82.
- Oreopoulos A, Padwal R, Kalantar-Zadeh K, et al. Body mass index and mortality in heart failure: a meta-analysis. Am Heart J. 2008;156(1):13–22.
- Ahima RS, Lazar MA. Physiology The health risk of obesity-better metrics imperative. Science. 2013;341(6148):856–8.
- Chrysant SG, Chrysant GS. New insights into the true nature of the obesity paradox and the lower cardiovascular risk. J Am Soc Hypertens. 2013;7(1):85–94.
- Amer A, Scuffell C, Dowen F et al. A national survey on enhanced recovery for renal transplant recipients: current practices and trends in the UK. Ann R Coll Surg Engl. 2022. https://doi.org/10. 1308/rcsann.2021.0365. Epub ahead of print.
- Torensma B, Hisham M, Eldawlatly AA et al. Differences between the 2016 and 2022 editions of the enhanced recovery after bariatric surgery (ERABS) guidelines: call to action of FAIR data and the creation of a global consortium of bariatric care and research. Obes Surg. 2022;1–11. https://doi.org/10.1007/s11695-022-06132-7. Epub ahead of print.

**Publisher's Note** Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.