



## COVID-19 Vaccination and Bariatric Surgery

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Dear Editor,

We would like to share ideas on “COVID-19 Vaccination and Timing of Bariatric Surgery: Considerations and Concerns for Patients with Severe Obesity [1].” Pazouki et al. noted that “we encourage operating on fully vaccinated patients. . . . the second shot of the vaccine and the surgery, with more preference for the latter due to its lower likelihood of infection after surgery” [1]. We agree that it is necessary to prevent COVID-19 for the patient. However, we should have a careful consideration for vaccination management. An obese case usually has a high blood viscosity [2], and the COVID-19 vaccine can induce increased blood viscosity [3]. Additionally, after any operation, a change of blood viscosity can occur [4]. Hence, there might be a possible problem of hyperviscosity in an obese subject after vaccination. Based on these factors, the COVID-19 vaccination should be provided before operation. Pre-operation COVID-19 can also help decrease possible COVID-19 infection of the hospitalized patient during pre-operation period. In case that an emergency surgery is required, there must be a good monitoring of complication of post-operation COVID-19 vaccination.

### Declarations

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

**Consent to Participate** Informed consent does not apply.

**Conflict of Interest** The authors declare no competing interests.

### References

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