



In reply: Is sugammadex alone enough to cause anaphylaxis?

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To the Editor:

We would like to thank for fruitful comments on my article “A suspected case of rocuronium–sugammadex complex-induced anaphylactic shock after cesarean section” [1].

We are wondering if they believe that sugammadex alone caused the anaphylaxis in our case? We, at first, considered sugammadex was the causative agent because our patient fell into anaphylactic shock following sugammadex administration and extubation. However, a later intradermal skin test with undiluted rocuronium 40 min after sugammadex tests revealed a strong positive reaction. This test made her vital signs fall into a shock state. While the technique of our skin test might be inappropriate, we do not think our rocuronium test was false positive because the reaction was too severe. Then, our subsequent skin test with premixed sugammadex–rocuronium complex was positive. Comprehensively, we think the best explanation for this case is that rocuronium–sugammadex complex, not rocuronium alone or sugammadex alone, induced anaphylaxis.

We are very thankful to them for introducing the well-established report of the first case of sugammadex-induced anaphylaxis validated by the basophil activation test (BAT) [2]. Additional *in vitro* tests like BAT must enable us to confirm the causative agent without exposing the patient to further risk.

Compliance with ethical standards

Conflict of interest Masakazu Yamaoka has no conflict of interest.

References

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2. Takazawa T, Horiuchi T, Yoshida N, Yokohama A, Saito S. Flow cytometric investigation of sugammadex-induced anaphylaxis. *Br J Anaesth.* 2015;114:858–9.

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