

# Sugammadex usage and awareness about re-administration of Rocuronium after Sugammadex

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## Introduction :

- ❖ Sugammadex highly effective for reversal of neuromuscular blockade induced by rocuronium.
- ❖ Patients may require anaesthesia and tracheal intubation immediate postoperative period, soon after reversal of rocuronium by sugammadex.
- ❖ When an option, after administering sugammadex (4 mg/kg) use rocuronium recommendations are as follows: **0.6 mg/kg and 1.2 mg/kg, 4 hours and 5 min**, respectively, after using sugammadex<sup>1</sup>.
- ❖ The onset may be prolonged to 4 minutes, and duration may be shortened up to 15 minutes after re-administration of rocuronium 1.2 mg/kg within 30 minutes after sugammadex administration<sup>2</sup>.
- ❖ Re-administration of rocuronium after the immediate reversal (16 mg/kg) waiting time of 24 hr.
- ❖ So, we explored the knowledge of the anaesthetist about the re-administration of rocuronium after reversal sugammadex.

## Method :

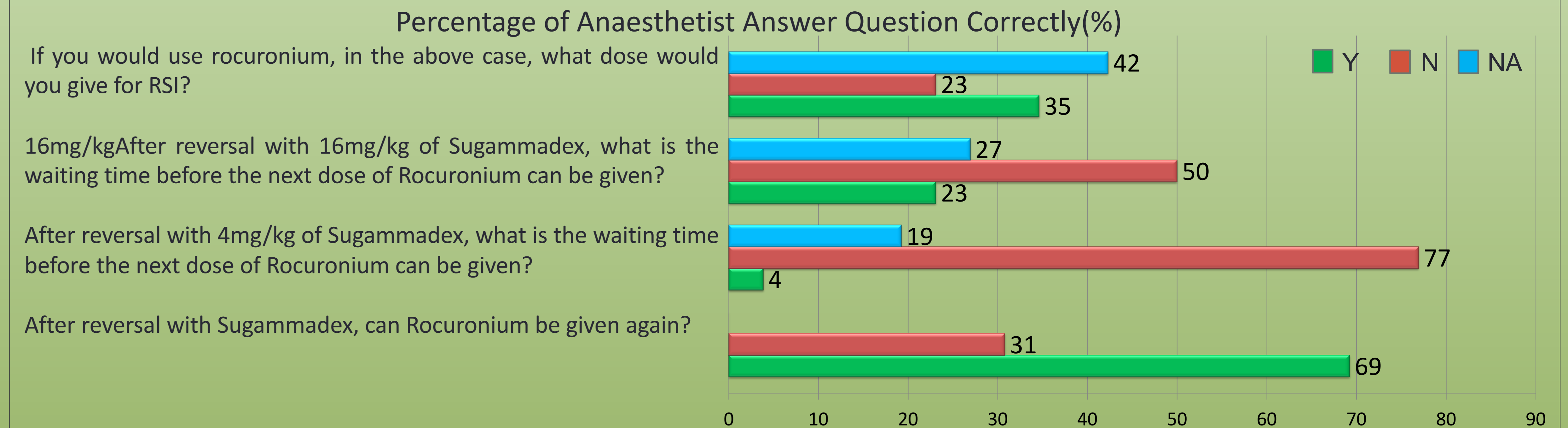
- ❖ Questionnaires were presented to 26 anaesthetists of various grade in our hospital.
- ❖ Questions explore the sugammadex usage and knowledge about the re-administration of rocuronium after sugammadex.
- ❖ Correct answer was given Yes(Y), the wrong answer no(N) and not answer(NA).

## Result:

- ❖ Response rate was 100% (26/26).
- ❖ Sugammadex most commonly used in the difficult airway(38%).
- ❖ One-third anaesthetist's (31%) were not aware of rocuronium be given after reversal.
- ❖ The maximum anaesthetists were not aware of the waiting time and dosage of rocuronium to be given after reversal with sugammadex 4mg/kg(77%) and 16mg/kg(50%).

## References

- 1.[http://www.ema.europa.eu/docs/en\\_GB/document\\_library/EPAR\\_Product\\_Information/human/000885/WC500052310.pdf](http://www.ema.europa.eu/docs/en_GB/document_library/EPAR_Product_Information/human/000885/WC500052310.pdf) – accessed November 2014.
2. Fabregat-López J et al (2011) Re-establishment of neuromuscular block by rocuronium after sugammadex administration. Can J Anaesth 58: 658659.



## What now?

- Participating anaesthetist were informed about the dosage and waiting time for rocuronium after the sugammadex
- This work was plan to present in clinical governance meeting
- A anaesthetist information leaflet has been designed and is awaiting the approval before distribution

### Anaesthetist Information leaflet About Rocuronium Dosage and Waiting Time After Sugammadex

Re-administration of Rocuronium or Vecuronium after routine reversal (up to 4 mg/kg Sugammadex):	
Minimum waiting time	NMBA and dose to be administered
5 minutes	1.2 mg/kg Rocuronium Onset Prolonged (4 Minutes)   Duration Shorten (15 Minutes)
4 hours	0.6 mg/kg Rocuronium or 0.1 mg/kg Vecuronium

Re-administration of Rocuronium or Vecuronium after 16 mg/kg sugammadex reversal :	
Minimum waiting time	NMBA and dose to be administered
24 hours	1.2 mg/kg rocuronium

## Discussion:

- ❖ Further knowledge and education are necessary for all the anaesthetist for the usage of rocuronium and another neuromuscular blocker after reversal with sugammadex.
- ❖ Creation of chart regarding the dosage and waiting for the time of rocuronium after reversal with sugammadex and this chart to be kept in operation theatre for easy accessibility.