SEVERE BRADYCARDIA AND ASYSTOLIA ASSOCIATED WITH SUGAMMADEX

Catarina Oliveira, Vânia Simões, Catarina Marques, Leina Spencer, Rita Poeira, Margarida Casteleira
Centro Hospitalar Lisboa Central; Anesthesiology Department – Dra. Isabel Fragata

INTRODUCTION

Sugammadex is a selective relaxant binding agent, recently introduced to reverse neuromuscular blockade induced by rocuronium and vecuronium. Its efficacy and safety are well demonstrated in multiple clinical trials, being severe cardiac adverse events a rarity (<1%)¹.

CASE REPORT

Incarcerated umbilical hernia - Urgent herniorraphy

- Male, 54 yrs old, past history of hypertension, dyslipidemia and obesity
- Rapid sequence induction: Fentanyl (2µg/kg), Propofol (2mg/kg), Succinylcholine (1,5mg/kg)
- Maintenance of anaesthesia: Desflurane
- Neuromuscular blockade: Rocuronium
- Surgery lasted 20min and proceeded uneventfully

End of surgery

TOF 2
Sugammadex
200mg IV

30sec later

**Marked bradycardia (30bpm)
followed by asystolia**
Atropine 1mg IV
Chest compressions

1min later

Sinus Rhythm
(63bpm)

2min later

Spontaneous
ventilation
Extubation

PACU and hospital stay: patient remained stable
Clinical discharged: 48h later

DISCUSSION

Marked bradycardia and cardiac arrest may be observed after the administration of sugammadex¹. As far as we know, there's just one case reporting severe bradycardia induced by sugammadex². Disturbance in cardiac conductance can occur but no cases of arrhythmia have been reported. Cases of cardiovascular collapse have been described in the context of hypersensitivity reactions and never as a cardiac side effect³.

Our case is a reminder that cardiac arrest is a rare but possible side effect of sugammadex and that awareness must be raised for a successful outcome.

REFERENCES

¹<http://www.ema.europa.eu>; ²Bilgi M, et al; *Int J Med Sci Public Health* 2014;3(3):372-374; ³Tsur A, Kalansky A. *Anaesthesia* 2014;69:1251–1257