**Título:** Anaphylaxis to Sugammadex: a case report

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(TEM FOTO)

**Resumo:**

This case report restates the potential for development of hypersensitivity reactions following administration of sugammadex and bolsters awareness of its signs and symptoms, as well as the treatment algorithm for a possible anaphylactic reaction.

A 27-year-old, 83kg male, ASA I, without history of allergies or surgical interventions, underwent posterior instrumentation and fixation of lumbar fracture.

ASA standard monitoring, BIS and TOF were established. General anesthesia was induced (fentanyl 0.15mg, propofol 200mg and rocuronium 80mg). After intubation, anesthesia was maintained with 2% sevoflurane.

At the end of surgery, sugammadex 200mg was administered and patient was extubated. 1,5 minutes after, sudden fall in HR from 69 to 39 bpm and hypotension 57/32 mmHg ensued. A generalized erythema and papules evidenced, over the patient’s face and trunk (fig.1). Crystalloid resuscitation began, adrenalin 0.5 mg IM, hydrocortisone 200mg IV, and clemastine 2mg IV were administered.

MAP improved, BP reaching 120/63 mmHg, HR 83 bpm and ECG was normal. The patient made a good recovery and was discharged a week later.

Adverse effects reported in association with sugammadex are rare. This patient satisfies the World Allergy Organization’s clinical criteria for the diagnosis of anaphylaxis.

We were unable to perform any blood tests to the patient. The currently available tryptase assay has a low sensitivity. The patient refused the skin test requested. In this case, we assumed that the trigger was the sugammadex because no other medication had been given in the last 2h. The timing of symptoms and their relief following treatment support diagnosis.

The Japanese Society of Anesthesiologists has issued a warning about sugammadex induced anaphylactic shock1. In the UK, the 6th National Audit Project study found an incidence of 0.0016% of sugammadex anaphylaxis2.

Most of hypersensitivity reactions occur within 5 minutes of administration3. Therefore, increased vigilance is recommended during such critical timeframe.

Learning Points:

-Prompt assessment and management of anaphylaxis are critically important.

- There is potential for hypersensitivity reactions following the administration of sugammadex.

- Awareness must be raised about drug-induced hypersensitivity during the critical 5-min period.

REFERENCES

1- BMC Anesthesiol. 2014, 14,92

2 - Br J Anaesth. 2020 Jan 22:S0007-0912(20)30008-8

3 - Hypersensitivity associated with sugammadex: a systematic review. 2014, Anaesthesia,69: 1251-1257

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