IDENTIFICATION OF SAFE PERIOPERATIVE PHARMACOTHERAPY IN A PATIENT WITH ALPHA-GAL SYNDROME: A CASE REPORT

Neira Rodríguez-Hermida M[1], Caeiro Martínez L[1], Albiñana Pérez MS[1], Pato López O[2], Vázquez Vázquez M[1], Fernández Diz C[1], Torres-Pérez A[1], Gómez Costa E[1], Margusino Framiñan L[1,3]

[1]Pharmacy Department, A Coruña University Hospital Complex. [2]Anesthesiology Department, A Coruña University Hospital Complex. [3]Research Group of Hospital Pharmacy. Biomedical Research Institute A Coruña (INIBIC), A Coruña University Hospital, Sergas, A Coruña University.

BACKGROUND

- **Alpha-gal syndrome (AGS)** is an IgE-mediated hypersensitivity reaction to the oligosaccharide galactose-α-1,3-galactose. It is characterized by delayed allergic reactions after ingestion of mammalian meat or derived products.
- AGS poses an additional challenge because **many drugs and excipients** (e.g. gelatin, lactose, magnesium stearate, glycerol) are **of animal origin**. In case of surgical procedures there is uncertainty as evidence is scarce and limited to case reports.

AIM AND OBJECTIVES

- 58 year-old man. Diagnosed with AGS in 2010 after multiple allergic reactions to tick bites and red meat ingestion.
- He tolerated some animal-derived excipients such as lactose and magnesium stearate.
- Home medications included: simvastatin, omeprazole, bromazepam and an emergency epinephrine autoinjector.
- He was scheduled to undergo mechanical aortic valve replacement.

MATERIALS AND METHODS

Comprehensive perioperative medication review by the hospital pharmacy service.

A total of **65 medications** (anesthetics, antibiotics, analgesics, anticoagulants, supportive therapies) were screened for potentially unsafe excipients.

A premedication protocol with intravenous hydrocortisone and dexchlorpheniramine was established.

Heparin safety was assessed with a provocation test prior to surgery, which was well tolerated.

RESULTS

Perioperative treatment included drugs previously determined to be safe: cefazolin, tranexamic acid, dexmedetomidine, opioids, benzodiazepines and others

During surgery, the patient received hydrocortisone, a heparin test dose, and subsequent full heparinization with the same batch. The surgical procedure was performed without complications.

Postoperatively, anticoagulation was initiated with fondaparinux as bridging therapy, followed by acenocoumarol containing magnesium stearate, which was accepted based on prior tolerance.

CONCLUSIONS

This case illustrates the critical role of hospital pharmacists in ensuring safe drug use in AGS, where published evidence remains very limited. Assessment of active ingredients and excipients, consideration of individual tolerance, and close multidisciplinary collaboration allowed a safe perioperative course. The development of standardized protocols for the management of AGS patients is essential to enhance patient safety and provide guidance for future clinical practice.

5PSQ-134

martin.neira.rodriguez.hermida@sergas.es

@farmachuac