



# OPTIMIZATION OF INTRACAMERAL CEFUROXIME CONSUMPTION IN THE PREVENTION OF POSTOPERATIVE ENDOPTHALMITIS

Poquet-Jornet JE.<sup>1</sup>, Del Moral-Sanchez JM.<sup>1</sup>, Carrera-Hueso FJ<sup>2</sup>.; Cuesta-Grueso C.<sup>1</sup>, Munilla-Das A.<sup>1</sup>, Sanchez-Aranda S.<sup>1</sup>

<sup>1</sup>Pharmacy Department. Hospital de Denia Marina Salud, SPAIN <sup>2</sup>Pharmacy Department. Hospital La Plana, Villareal, SPAIN

## BACKGROUND

"ESCRS" is a study of prophylaxis of endophthalmitis after cataract surgery, demonstrating the effectiveness of cefuroxime (1mg / 0.1mL) administered in the anterior chamber at the end of cataract surgery for the prevention of the appearance of endophthalmitis. The marketed drug (Prokam ©) contains 50 mg per vial in a final volume of 10 ml. Manufacturer recommendation: one vial per patient (even if it involves discarding 98% of the contents of the vial).

## OBJECTIVES

To describe the optimization in the use of Prokam © (cefuroxime) vials through its redosification in order to obtain prefilled syringes with a concentration of 1mg / 0.1 mL.

## MATERIAL AND METHODS

### BIBLIOGRAPHIC SEARCH

#### Intracameral cefuroxime

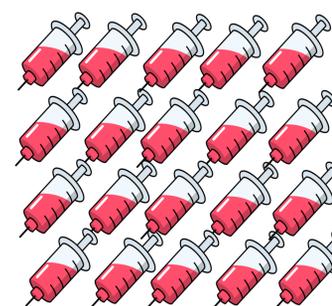
- drug indications
- galenic properties
  - stability
  - conservation
- necessary microbiological controls.



### PHARMACY / OPHTHALMOLOGY SERVICES CONSENSUS

#### Preparation of cefuroxime 2 mg / 0.2 ml pre-filled syringes

- in order to administer 1 mg of cefuroxime
  - made in batches of 20 units
  - frozen at -18 °C.
- ordered according to the daily surgical part
  - sent directly to the operating room.



### COST ANALYSIS

- cefuroxime 50 mg vials
- insulin syringe of 0.3 ml
  - sterile caps
- double bag (packaging)
- personnel who elaborates the syringes



## RESULTS

In 2017, 1,239 syringes with an associated cost of 847 euros were prepared. The hospital considers the cost for each vial of Prokam © to be 7.80 euros, so if pre-filled syringes had not been prepared in the pharmacy service the cost would have increased to 9,664 euros. No postoperative endophthalmitis was described.

## CONCLUSIONS

The preparation of pre-filled syringes of cefuroxime 0.2 mg / 0.2 ml has become a cost optimization program to achieve 91% reduction in the cost of treatments with these drug.