OPTIMIZATION OF INTRACAMERAL CEFUROXIME CONSUMPTION IN THE PREVENTION OF POSTOPERATIVE ENDOPHTHALMITIS

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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 (Prokram ©) 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 Prokram © (cefuroxime) vials through its redosification in order to obtain prefilled syringes with a concentration of 1mg / 0.1mL.

MATERIAL AND METHODS

BIBLIOGRAPHIC SEARCH

Intracameral cefuroxime

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

PHARMACY / OPHTALMOLOGY 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.