the effectiveness and safety of the eye drops in a premature infant.

Material and methods Case description: a premature infant (26 weeks' gestation) was diagnosed with conjunctivitis due to *Stenotrophomonas maltofilia* multi-resistant, sensitive to levofloxacin. The neonatal intensive care unit requested the manufacture of levofloxacin based eye drops.

The pharmacy service initiated a bibliographic search to find out the indication, dosage, manufacture and stability of levofloxacin 0.05% based eye drops.

Results We decided to prepare it with injectable levofloxacin 500 mg/100 mL, taking into account the physical and chemical characteristics an ophthalmic drug should have:

- non–contraindicated excipients (injectable excipients: water, HCl and NaOH);
- acceptable pH (4.4–5.5) and osmotic concentration (300–310 mOsm/l).

We packaged the parenteral solution in a horizontal laminar flow cabin, filtering it with a 0.22 µm filter, in a light protected eye drops bottle. We checked whether it was clean and particle free. The validity period was established: 9 days inside a refrigerator, according to the risk matrix for sterile preparations included in the 'Guía de Buenas Prácticas de Preparación de Medicamentes'.

The patient was started on treatment with levofloxacin 0.05% eye drops with the following dosage regimen: 1 drop every 6 hours. We recommended including the nasolacrimal canal for at least 2 min in order to avoid systemic absorption of the eye drops when administered via the eyes and to decrease any systemic adverse reactions. The patient showed good progress, so we decided to interrupt the treatment after 7 days due to symptomatic improvement with no conjunctivitis secretion. The eye drops were well tolerated.

Conclusion and relevance To manufacture eye drops it is necessary to know the physical and chemical characteristics of the active substance (pH, osmotic concentration and excipients), to ensure that it is effective, safe and stable.

The eye drops were effective and well tolerated in this premature infant, which means that it can be considered as a good option for other patients.

REFERENCES AND/OR ACKNOWLEDGEMENTS

No conflict of interest.

3PC-008 INTRAVENOUS PERFUSION OF CEFTOLOZANE–TAZOBACTAM USING ELASTOMERIC INFUSION PUMPS

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Background and importance Ceftolozane–tazobactam (CT) intravenous infusion using portable elastomeric infusion pumps (EIP) is useful, especially in patients infected with resistant bacteria.

Aim and objectives The aim of the study was to describe CT infusion using EIP (CT-EIP) and analyse the healthcare costs avoided versus hospital admission.

Material and methods This retrospective study included all patients treated with CT-EIP. The study period was January 2017 to October 2019. Recorded data were clinical data obtained from patient electronic medical records. For the economic evaluation we considered costs of the EIP, nurse working time needed for preparation and cost of the hospital at home care unit (HHU). The cost of the medication was not included as it was the same whether the patient was in hospital or at home. Physician and pharmacist working time was not analysed as it was considered that hospital admission and management by the HHU were equivalent.

For the calculation of hospital admission costs, the regional normative was considered: a day at the HHU costs € 80.70, and the cost per hospital admission day is € 528.95. Nursing work needed for preparation of the EIP costs € 15.81/hour (a nurse prepares an average of 10 EIP/hour).

Baxter Healthcare Corporation manufactured the EIP used: 24 hour duration devices (240 mL/24 hours, flow rate 10 mL/hour) for continuous perfusion or 30 min duration devices (100 mL/30 min, flow rate 200 mL/hour) for intermittent perfusions.

The unit cost of EIP was € 25.63 for the 240 mL/24 hour devices (needed 1/day) and € 15.40 for the 100 mL/30 min one (needed 3/day). Average cost per day of treatment with CT-EIP were € 35.91 (range € 25.63–46.20/day).

Results A total of 220 CT-EIP were prepared for 10 patients (5 men, 5 women; mean age 58.1 years (range 19–90 years) with hospital acquired pneumonia (6), off-label situations (2), severe abdominal infection (1) and severe urinary infection (1). Microorganisms isolated were *Pseudomonas aeruginosa* (10/10 patients); *Staphylococcus aureus* (2/10); *and Escherichia coli* (1/10). Eight of 10 patients were treated with concomitant antibiotic. Treatment took an average of 13 days (range 7–29) per patient with CT-EIP.

Seven of 10 patients were managed by HHU and the rest had ambulatory care after hospital discharge. Successful progression occurred in five patients. Five patients died due to other severe pathologies (cancer, cystic fibrosis, acute rejection, etc).

The avoided estimated cost was € 55 856.26.

Conclusion and relevance CT-EIP was a cost effective alternative, which enabled patients to stay at home, avoiding unnecessary hospital admission and improving their quality of life.

REFERENCES AND/OR ACKNOWLEDGEMENTS

No conflict of interest.

3PC-009 TREATMENT OF RECURRENT OTOMYCOSIS WITH LOCAL APPLICATION OF A COMPOUNDED FORMULATION OF VORICONAZOLE EAR DROPS: CASE SERIES

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Background and importance Otomycosis is a suppurative fungal infection that affects the external auditory canal. Patients have a high rate of recurrence and are prone to invasive fungal infections after receiving limited therapeutic options with low response.

Aim and objectives The aim of the study was to describe the use of a sterile formulation of topical voriconazole ear drops