

LEVOFLOXACIN 0,05% EYEDROPS ELABORATION: A CASE OF STUDY

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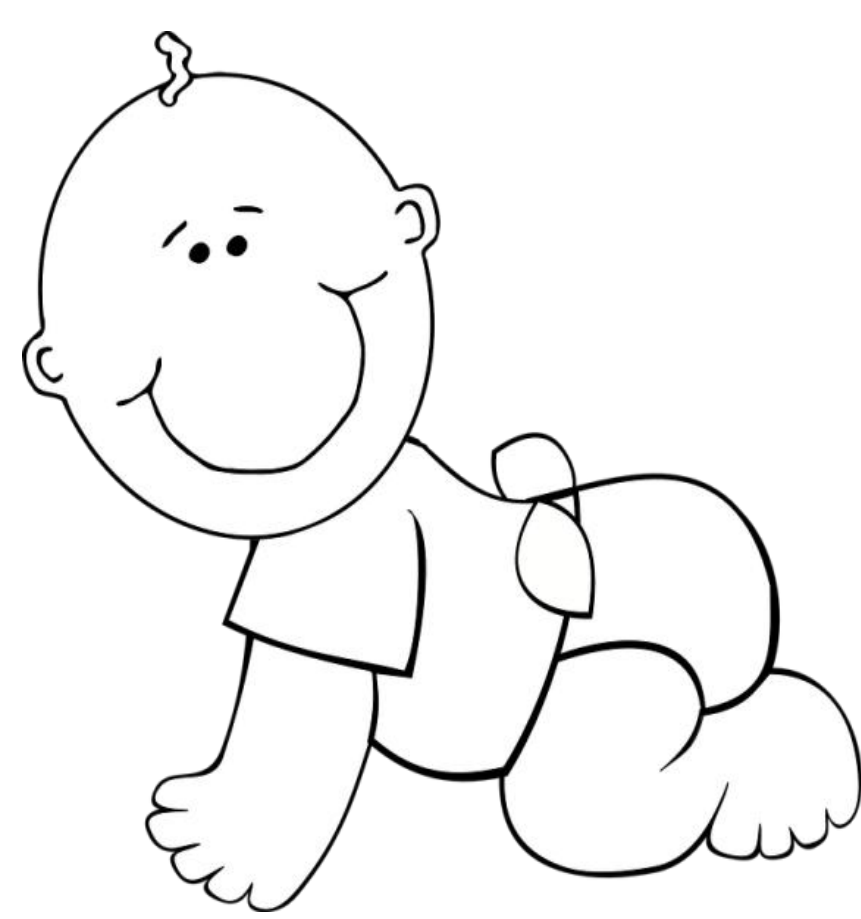
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Objectives

Describing Levofloxacin 0,05 % eye drops formulation.

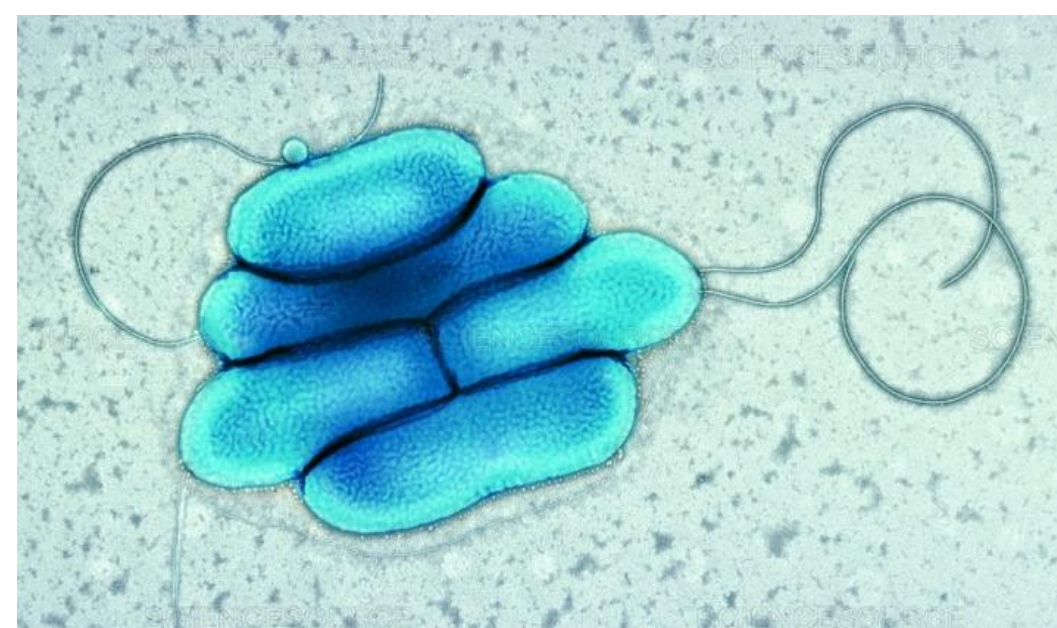
Evaluating the effectiveness and security of said eyedrops in a premature patient.

Study design



Premature patient
(26 weeks gestation)

Conjunctivitis



Stenotrophomonas
maltophilia multi-
resistant

Sensitive to
levofloxacin



Bibliographic search
by Pharmacy Service

Results

We decided to prepare it with injectable levofloxacin 500mg/100ml, 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 horizontal laminar flow cabin, filtering it with a 0,22 mcm filter, in a light protected eyedrops bottle. We checked whether it was clean and particle-free.

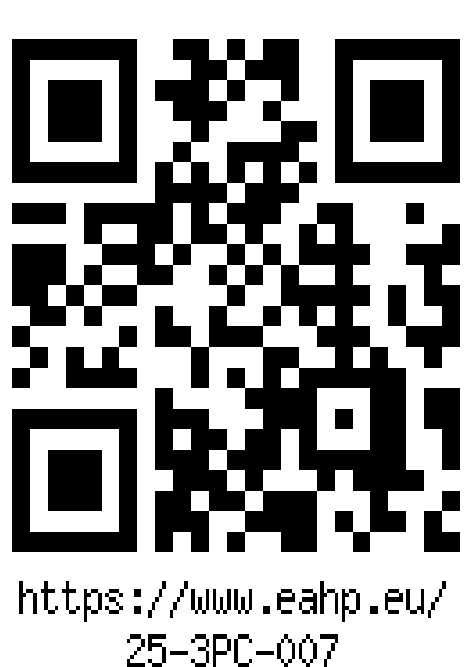
Validity period was established: nine days inside a refrigerator, according to the risk matrix for sterile preparations included in the "Guía de Buenas Prácticas de Preparación de Medicamentos.

One drops /6h
Including the nasolacrimal canal for at least two minutes in order to avoid systemic absorption

Conclusions

In order to manufacture eye drops it is necessary to know the physical and chemical characteristics of the active substance (pH, osmotic concentration and excipients), in order to make sure that it is effective, secure and stable.

The eyedrops were effective and well-tolerated in the premature patient, which means that it can be considered as a good option for other patients.



<https://www.eahp.eu/25-3PC-007>

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