Conclusion Based on these results, we have identified some solutions to reduce the risk: the double-check carried out by two different people could solve the risk due to incorrect labelling; and the software used by pharmacists can be improved to reduce the risk related to the patients’ allergy or cross-reaction. Finally, errors can be reduced through clearer and specific sessions of training for the compounders.

REFERENCES AND/OR ACKNOWLEDGEMENTS

No conflict of interest.

3PC-051 IMPACT OF OPHTHALMOLOGICAL PREPARATIONS IN THE PHARMACY SERVICE OF A REFERENCE HOSPITAL

I Salar Valverde, N Manresa Ramon, M Gil Candel*, M Onteniente Candela, C Pastor Mondejar, C Caballero Requejo, C Iñesta Navalon, M García Coronel, E Ubrieta Sanz. Hospital General Universitario Reina Sofia, Hospital Pharmacy, Murcia, Spain

Background There are many medicinal products that, although they have shown efficacy and safety in different ophthalmological indications, are not authorised or commercially available for ophthalmic administration.1

Purpose To evaluate the elaborations of ophthalmological medicines which must be prepared in the pharmacy service.

Material and methods This was a retrospective study of ophthalmological preparations in a reference hospital from January 2016 to December 2017. The parameters measured were treatment, administration (eye drops or intraocular injections) and economic impact.

Data source: SAVAC computer system.

Results Over the studied period, 37,618 ophthalmological preparations were elaborated in our laboratory: 20,430 (2017) and 17,188 (2016).

The preparation of eye drops were 16,838 (2017) and 13,990 (2016). During 2017, we observed that autologous serum 20% supposed 8,810 preparations, cyclosporine 0.05% (6,800), autologous serum 50% (313), vancomycin 5% (200) and ceftazidime 5% (150). The main increase was concentrated in autologous serum 20% eye drops and cyclosporine 0.05% eye drops (17% and 20%, respectively).

The preparation of intraocular injections were 3,592 (2017) and 3,128 (2016). During 2017, the five preparations with the highest number of preparations were: cefuroxime 1 mg/0.1 ml (1,630); aflibercept 2 mg/0.05 ml (1,193); vancomycin 1 mg/0.1 ml (481); ceftazidime 2 mg/0.1 ml (130); and bevacizumab 5 mg/0.2 ml (74). It can be observed that these five preparations were 96% of the total intraocular injections. The main increase was concentrated in the saving of aflibercept 2 mg/0.05 ml intraocular injections.

It has also been shown that bevacizumab 2.5% eye drops (£12,008/4/year) and intravitreal syringes of aflibercept 2 mg/0.05 ml (£244,920/year) account for 98% of the total expense (£260,920) in ophthalmology preparations.

Conclusion The ophthalmological preparations in a pharmacy hospital have increased by 19%. Autologous serum 20% and cyclosporine 0.05% were impacted of 92% eye drops, including the longest storage duration tested. They must be prepared in the pharmacy service according to quality criteria to ensure its effectiveness, stability and sterility,1 and supposed a high economic impact (£260,816.76).

REFERENCE AND/OR ACKNOWLEDGEMENTS


No conflict of interest.

3PC-052 CHEMICAL DISINFECTANTS VS STERILE WATER AND COMPOSITE FIBRE: THE EFFECT OF CLEANING METHODS ON MICROBIAL CONTAMINATION IN A CLASS A PHARMACEUTICAL COMPOUNDING ENVIRONMENT

E Gleditsch. Sykehusapotekene HF – Oslo Hospital Pharmacy, Manufacturing, Oslo, Norway

Background Chemical disinfectants have traditionally been used to clean pharmaceutical facilities to ensure acceptable microbiological conditions. However, the use of such agents is costly, time-consuming and environmentally undesirable. Exchanging the disinfectants with sterile water and composite fibre cloths was tested in a class A hospital pharmacy compounding environment with regard to their effects on microbiological contamination.

Purpose The goal of the project was to establish whether an acceptable level of microbiological cleanliness could be upheld in the production facility when cleaning with sterile water and composite fibre cloths instead of traditional chemical disinfectants.

Material and methods The sterile chemical disinfectants were replaced by an alternating regimen of Klercide Quat/Biguanide, Amine, Sporicidal low residue peroxide and neutral detergent, provided by Ecolab (St Paul, MN, USA). The alternative system, consisting of sterile water and composite fibre cloths, was provided by De forenede dampvaskerier (Vienna, Maribo, Denmark). Klercide Sterile 70% ethanol (Ecolab, St Paul, MN, USA) was used for disinfection of grade A between each production, and for surface disinfection of materials to be transferred into grade A.

The effect of cleaning methods was compared for four pharmaceutical isolators and two biological safety cabinets, all of class A grade. The quality of the microbiological conditions was monitored with glove prints, settle plates and contact plates (Tryptone Soya Agar, Oslo University Hospital, Oslo, Norway).

The rate of contaminated tests were comparable for the four months period before and after the change in cleaning method were compared.

Results The rate of contaminated tests were comparable for the 24 month period before and after the change in cleaning method. The rate of positive tests (2 cfu/plate) were for glove prints 5.3% before (n=1562) and 5.0% after (n=1584), settle plates 3.2% before (n=809) and 3.0% after (n=824) and contact plates 2.7% before (n=807) and 1.5% after (n=817).

Conclusion The level of microbiological contamination in a class A hospital pharmacy compounding environment is maintained when cleaning with sterile water and composite fibre cloths, compared to traditional cleaning with chemical disinfectants.

REFERENCES AND/OR ACKNOWLEDGEMENTS

None.

No conflict of interest.