Purpose To describe the use of a new therapy based on PRGF eye drops and the baseline and pathological characteristics of the participants with ocular surface disease.

Material and methods A retrospective observational study was carried out from September 2016 to 2017 in a tertiary hospital. We included patients who were treated with PRGF and collected it at the Outpatient Pharmaceutical Care unit of the hospital pharmacy. The PRGF eye drops was manufactured in the pharmacy service with a commercial kit. The demographics and clinical parameters were collected from the medical history: age, sex, number of patients, and the pathology and the efficacy of the treatment.

Results The 76% of patients treated with PRGF (n=14)were evaluated (17 eyes). The mean age was 66 years (53–81). Forty-five per cent of the patients were females (n=5). The most frequent pathology was corneal epithelial disruption (73%, n=8) followed by Sjogren syndrome (18%, n=2) and keratopathy and keratitis (9%, n=1). A total of 10 patients were treated previously with autologous serum eye drops without success. After the beginning of treatment with PRGF, 81% of patients showed a resolution of their ocular surface disease. Only two patients did not show an improvement in their clinical symptoms. The average treatment duration with PRGF was 5.7 months. Concerning security, in this period no adverse event related to the PRGF eye drops were detected. The burden of care for the Pharmacy Department resulted in 21 dispensations (two dispensations on average per patient) and a total of 651 PRGF single-dose eye drops prepared and dispensed to patients. Nursing staff took about 2 hours to prepare each dispensation.

Conclusion The study showed that the use of PRGF eye drops is effective in treating ocular surface diseases. Regarding tolerance for PRGF, it seems safe for the patients. In addition, preparing and dispensing this treatment resulted in an increase in workload in the Pharmacy Department.

REFERENCES AND/OR ACKNOWLEDGEMENTS

To my workmate. Thank you.

No conflict of interest

5PSQ-097 TOXICITY ASSOCIATED WITH GENE POLYMORPHISMS IN PATIENTS WITH COLORECTAL CANCER, TREATED WITH FLUOROPYRIMIDINES AND ANALOGUES, IRINOTECAN AND PLATINUM COORDINATION COMPLEXES

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Background Gene variants, such as single nucleotide polymorphisms, have a clinical relevance in the oncological field, when they affect genes encoding enzymes involved in drug metabolism, influencing drug toxicity, treatment compliance and efficacy.

Purpose The purpose of this work is to obtain data to choose a personalised therapy based on individual gene variations, minimise adverse events (AE) and avoid the discontinuation of therapy resulting in tumour progression.

Material and methods A retrospective study was conducted on 57 males and females, age ≥18, with colorectal cancer, in therapy with five protocols using different combinations of 5-fluorouracil, irinotecan and oxaliplatin.

The study evaluated the number of cases where therapy was temporarily discontinued or suspended due to AE that concerned haematological, neurological and gastrointestinal toxicity according to the CTCAE system, which provides a numerical grading scale for AE description.

The prevalence of polymorphisms and association between toxicity and polymorphisms were evaluated calculating odds ratios (OR) with 95% confidence interval.

The Chi-square statistical significance test was applied.

Results 10 polymorphisms were analysed. In order of prevalence they are:

- UGT1A1*28 (38.6%, n=22)
- GSTPi (26.32%, n=15)
- ABCC2rs818 (17.54%, n=10)
- DPYDc496A>G (15.79%, n=9)
- SLC31A1 (12.28%, n=7)
- ABCC2rs717 (10.53%, n=6)
- DPYDc. 1129–5923C>G (3.51%, n=2)
- DPYD*2Ac. 1905+1 G>A and DPYD*13 c. 1679T>G (1.75%, n=1)
- DPYDc. 2846A>T (0%).

OR values found the association between toxicity above 2nd grade and the presence of polymorphisms. The association is:

- Strong positive for DPYD*2Ac. 1905+1 G>A (OR=10.68) and UGT1A1*28 (OR=7.43)
- Moderate positive for DPYDc. 1129–5923C>G (OR=3.58) and SLC31A1 (OR=2.13)
- Moderate negative for ABCC2rs818 (OR=0.33).

Absent for DPYD*13 c. 1679T>G, DPYDc496A>G, ABCC2rs717 and GSTPi.

Conclusion Often patients express different polymorphisms at the same time, developing a toxicity related to the total effects of all the polymorphic variants. This problem is particularly important for chemotherapeutics that are administered at very high doses, close to toxic doses, and takes on a clinical and economic relevance. The study of genes, involved in the metabolism and transport of many drugs, permits the prediction of drug toxicity and efficacy and, based on individual variations, establishing a personalised and safe therapy before the onset of the treatment.

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No conflict of interest