considered to be at risk to each healthcare professional, offering them other treatment options based on efficacy, safety and cost.

Results We reviewed 36 patients under treatment with tofacitinib, 28 females (73%), average age 51.6 years. 32 patients had rheumatoid arthritis and 4 patients had ulcerative colitis. We identified 13 (36%) patients with an increased risk of major adverse cardiovascular events and malignances, and all of them had rheumatoid arthritis: 7 patients were aged 65+ years, 5 patients had cardiovascular risk factors, and 2 patients had a malignancy process. We sent 11 personalised reports to healthcare professionals.

Conclusion and relevance One in three patients being treated with tofacitinib were affected by the security alert, and were considered to be a population at increased risk of major adverse cardiovascular events and malignances. This study allowed us to find these patients and communicate this information to healthcare professionals, providing them with an alternative treatment option based on efficacy, safety and cost.

References and/or acknowledgements https://www.aemps.gob.es/informa/notasinformativas/medicamentosusohumano-3/seguridad-1/2021-seguridad-1/xeljanz-tofacitinib-nuevas-precauciones-de-uso/

Conflict of interest No conflict of interest

5PSQ-137 MEDICATION ERRORS RELATING TO ISOAPPEARANCES IN THE EMERGENCY ROOM

B Fernández García*, C Fontela Bulnes, M Ercilla Liceaga, A Eceiza Díez, I Beristain Aramendi, A Ros Olaso, J Boo Rodriguez, T Gonzalez Fernández, B Odriozola Cincunegui, L Mendarte Barrenechea, MP Bachiller Cacho. *Hospital Universitario Donostia, Pharmacy Department, San Sebastián, Spain*

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Background and importance Medication errors (ME) are a common cause of harm to patients, especially in an emergency setting. The International Organization for Standardization (ISO) includes among the main objectives safety in the administration of medicines, sharing best practices and minimising the possibility of ME due to confusion of denominations and the external appearance of the products. This has the potential to significantly improve patient safety and the quality of healthcare. The World Health Organization (WHO) estimates that the annual cost of medication errors amounts to $42 billion, all potentially avoidable.

Aim and objectives The aim of this study was to determine the prevalence of ME related to isoapperances in the emergency room (ER), and to give visibility and enhance the importance of the recently created Isoappearance Group in the Emergency Department to achive ISO's objectives.

Material and methods A retrospective observational study was performed. ME that occurred in the ER in our hospital during the years 2019, 2020 and the first half of 2021 were analysed through our hospital's corporative electronic platform *SNAPS* (Patient Safety Notification and Learning System), developed by the Spanish Ministry, and available to all hospital professionals. In addition, the bibliography at the Institute for Safe Medication Practices (ISMP) website about 'sound-alike' and 'look-alike' errors was reviewed.

Results In the study period, 237 incidents were reported in the ER, and 44 of them were related to medication (18.5%). Specifically 22 of them (9.2%) corresponded to isoappearances (7 'sound-alike' and 15 'look-alike'). Six (27%) of the registered isoappearances reached the patient and could have been avoided. Although they could have harmed the patients, all the incidents were resolved.

Conclusion and relevance 'Sound-alike' and 'look-alike' errors have a high frequency, and it is a priority to work specifically on them. To work on this objective, a multidisciplinary isoappearances group formed by a clinical pharmacist, a nurse, and two physicians has been set up on site in the ER to optimise stocks by reducing the available concentrations, changing the providers so that the medications' appearance was different, and promoting safety culture.

REFERENCES AND/OR ACKNOWLEDGEMENTS

Conflict of interest No conflict of interest

5PSQ-138 IMPACT OF HIGH TEMPERATURE, SHAKING AND LIGHT ON QUALITY OF THE THERAPEUTIC PEPTIDE TEDUGLUTIDE (REVESTIVE) EVALUATED BY LC/MS/MS (ORBITRAP) PEPTIDE MAPPING ANALYSIS AND STRESS

[1]R Pérez-Robles*, [2]N Navas, [3]S Clemente-Bautista, [3]I Jiménez-Lozano, [3]MJ Cabañas-Poy, [4]J Cabeza, [4]A Salmerón-García. *[1]Instituto de Investigación Biosanitaria de Granada (FIBAO) – University of Granada, Analytical Chemistry, Granada, Spain; [2]University of Granada – Instituto de Investigación Biosanitaria de Granada, Analytical Chemistry, Granada, Spain; [3]Vall d'Hebron Hospital, Maternal and Child Pharmacy Service, Barcelona, Spain; [4]San Cecilio University Hospital, Department of Clinical Pharmacy, Granada, Spain*

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Background and importance Teduglutide (Revestive) is a recombinant human GLP-2 analogue indicated in the treatment of short bowel syndrome, a serious and highly disabling condition which results from either loss of portions of intestine or loss of critical intestinal function. A proteinaceous-based medicine, teduglutide is indicated to have low stability, thus the study of the effect of possible in-use mishandling and in-stress conditions are welcome to gain knowledge of its stability and degradation.

Aim and objectives To evaluate the impact on teduglutide's chemical structure when subjected to in-use mishandling and when it is degraded by the characterisation of its post-translational modifications (PTMs) obtained by liquid chromatography with tandem mass spectrometry **(LC/MS/MS) (Orbitrap) peptide mapping analysis after submitting teduglutide samples to 40°C and 60°C, to smooth shaking and to accelerated light exposition.**

Material and methods Samples of reconstituted teduglutide (Revestive) were submitted to 40°C and 60°C (3 hours), to smooth shaking (3 hours) and to accelerated light exposition (24 hours). Tryptic digestion was performed on these samples and the resulted fragments were separated and quantified by LC/MS/MS. BiopharmaFinder 3.1 software (Thermo Scientific) was used for PTMs identification.

Results Different PTMs related to the quality of the medicine were monitored in the primary structure of teduglutide (ie, deamidations, isomerisations and oxidations) [1]. No changes in the PTMs profiles were found in samples subjected to temperature and agitation in comparison to the PTMs profiles of fresh teduglutide. High percentages of oxidations were detected in the samples submitted to light exposition.

Conclusion and relevance The exposition to light modified the PTMs profile of teduglutide inducing oxidations in the primary structure (methionine and tryptophan residues). These

might affect teduglutide's security, efficacy and quality. Therefore, it is highly recommended to protect the drug from light during in-use manipulation. For temperature exposition (40°C and 60°C) and agitation, the PTMs profile was not modified, thus no specific recommendations need be noted in this regard.

REFERENCES AND/OR ACKNOWLEDGEMENTS

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Raquel Pérez-Robles is currently granted a postdoctoral position from the Junta de Andalucía, Spain.

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5PSQ-139 ANTICHOLINERGIC RISK EVALUATION IN HOSPITALISED PATIENTS

L Sanchez Dorrego*, C Esteban Gonzalez, N Pons, J Gonzalez Valdivieso. *Hospital Universitari Sagrat Cor, Pharmacy, Barcelona, Spain*

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Background and importance The combination of drugs with anticholinergic action can cause side effects in people with morbidity. This risk increases with age and frailty. There are different scales to estimate the anticholinergic risk (AR) but there is substantial variability between them. The Anticholinergic Burden Calculator (ABC) tool allows the calculation of the Drug Burden Index (DBI), which takes into account the prescribed dose and includes sedative drugs.

Aim and objectives To determine the AR of patients admitted to a second-level hospital.

To analyse their comorbidities and to relate them to possible anticholinergic side effects.

Material and methods Cross-sectional study carried out with patients admitted to the hospital ward. Patients older than 65 years and with more than five prescribed drugs were included in the study. The variables collected from the electronic medical history were: age, gender, morbidity, hospital service, drugs and dose. To obtain the AR, the ABC tool was used, expressing the values in DBI. According to AR, the patients were classified into three groups: without risk (0), medium risk (<1) and high risk (≥ 1).

The comorbidities of each patient were analysed. Those that were related to anticholinergic effects were selected and classified into two groups: (a) somatic symptoms (dry mucosa, constipation, urinary retention) and (b) neuropsychiatric symptoms (cognitive and functional dysfunction, agitation, falls).

Results A total of 183 patients were included: 60.1% women with median age 84.3 (SD 8.9) years. According to the DBI, patients were classified into three groups: without risk (15.3%), medium risk (40.4%) and high risk (44.3%). The total average DBI obtained was 0.97 (SD 0.86) and in the high-risk group was 1.7 (SD 0.78).

Comorbidities related to possible anticholinergic effects were found in 49.2% (n=90) of the patients. This percentage increased to 55.6% (n=50) by focusing on high-risk patients compared to medium-risk patients (32.2% n=29) and without-risk patients (12.2%, n=11). 87.4% of the comorbidities were neuropsychiatric symptoms.

Conclusion and relevance Most of the patients presented anticholinergic risk. Half of them had comorbidities that could be related to the effects of anticholinergic drugs. These comorbidities increased in direct proportion to anticholinergic risk. It would be advisable to implement a hospital protocol to reduce the anticholinergic burden.

REFERENCES AND/OR ACKNOWLEDGEMENTS

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5PSQ-140 PATIENT SAFETY CLIMATE IN A HOSPITAL PHARMACY DEPARTMENT

R Sánchez del Moral, T Blanco Espeso, I García Giménez*, E Sánchez Gómez, A Peláez Bejarano. *Hospital Juan Ramón Jiménez, Hospital Pharmacy, Huelva, Spain*

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Background and importance Patient safety should be a cross-cutting issue in all hospital services. It is important to assess patient safety culture in the units to implement improvement measures and offer quality and safe healthcare to patients.

Aim and objectives To analyse patient safety climate in a Hospital Pharmacy department.

Material and methods Descriptive, transversal study carried out through an anonymous survey in September 2021. All pharmacy staff were invited to participate.The survey applied was the Agency for Healthcare Research and Quality Hospital Survey SOPS Version 1.0-Spanish.

The survey has 42 items with five response options on a Likert-type scale from 1 (strongly disagree or never) to 5 (strongly agree or always).

A strength is considered if at least 75% of respondents rate the ítem positively, while it needs improvement if at least 50% rate it negatively. Items are grouped into 12 composite measures.

Data were analysed with an application available on the patient safety page of the Ministry of Health.

Results Response rate: 91% (44 surveyed). 69% tecnicians/nurses, 31% resident pharmacists/pharmacists. 56% worked 20–39 hours/week and the rest 40–59 hours; 46% had worked in the hospital for less than 1 year, 1 to 5 years (34%), 21 years or more (10%), 6 to 20 years the rest. 48% had been working in the unit for less than 1 year, 33% 1 to 5 years, 6 to 21 years or more the rest.12% had direct interaction with patients.

Global results were: teamwork within units 69%, supervisor/manager expectations and actions promoting patient safety 64%, communication openness 57%, organisational learning-continuous improvement 51%, feedback and communication about error 47%, overall perceptions of patient safety 42%, nonpunitive response to error 39%, teamwork across units 39%, frequency events reported 38%, staffing 38%, management support 37%, handoffs and transitions 29%.

The overall grade on patient safety was perceived: very good 45%, excellent 30%, acceptable 20%, poor the rest.

Conclusion and relevance Eight need-of-improvement areas were perceived: management support and handoffs-transitions being the worst rated. Teamwork within units, supervisor/manager expectations/actions were the best perceived.

No strengths were found; however, the overall perception was rated as excellent or very good by the majority.

Assessing the baseline-state of safety climate is a good starting point for identifying areas for improvement.

REFERENCES AND/OR ACKNOWLEDGEMENTS

Conflict of interest No conflict of interest