with a median of three (2–4) comorbidities and 26.7% poly-medicated with a median of seven (6–9) drugs per patient. The most common chronic diseases were: anxiety/depression (45.8%), dyslipidaemia (32.5%), hypertension (20.8%) and psychiatric disorders (19.2%). Benzodiazepines (32.5%), vitamin D (31.7%), proton-pump inhibitors (22.5%), statins (20%), antidepressants (18.3%) and antipsychotics (15%) were the most common drugs prescribed.

A total of 55 CSDIs were identified in 41 patients (34.2% of patients), of which 78.18% involved ARV drugs. Classes of drugs most involved in CSDIs were: pharmacokinetic enhancers (40%), protease inhibitors (38.18%), statins (25.45%), antipsychotics (25.45%) and antidepressants (14.54%). The risk of DRPs was high in 46.7% of patients. In statistical analysis (Mann–Whitney *U* test), the relationship between the number of comorbidities and the risk of DRPs and CSDIs was statistically significant ($p < 0.005$) in both cases.

Conclusion The results of the study demonstrate the aging of the HIV + population and the consequences that this entails: an increased risk of presenting DRPs as well as the risk of CSDIs. Due to this, a meticulous and multidisciplinary approach is necessary in this population in order to identify the most susceptible patients.

REFERENCES AND/OR ACKNOWLEDGEMENTS

No conflict of interest.

5PSQ-129 BALANCE AND CLASSIFICATION OF PHARMACEUTICAL INTERVENTIONS IN A GENERAL HOSPITAL OF SPECIALTIES: THE PERSONALISED HOSPITAL PHARMACY

¹F Gomez-de Rueda*, ²I Elósegui Horno, ¹B Cancela Díez, ²F Horno Ureña. ¹Complejo Hospitalario de Jaén, Hospital Pharmacy Clinical Pharmacotherapy, Jaén, Spain; ²Complejo Hospitalario de Jaén, Hospital Pharmacy, Jaén, Spain

10.1136/ejhp-2019-eahpconf.562

Background Pharmaceutical care (PC) is the ‘supply of medicines with the purpose of achieving concrete results that improve the quality of life of the patient’, being related to the global process of prescription through pharmaceutical intervention (PI).

Purpose Analyse the registration data of the PIs carried out in a tertiary hospital to avoid adverse effects and health hazards.

Material and methods Retrospective study of the PIs registered between January and August 2018. The PIs were structured in three blocks: Block 1: qualitative (method of communication of PIs); Block 2: quantitative (active principle, schedules, drugs included/not included in the Pharmacotherapeutic Guide (PTG) and dose adjustment in paediatric presentations); and Block 3: communicative (computer or telephone/personal), dose adjustment according to renal and hepatic functions and acceptance degree.

Results There were 573 PIs over 12 024 admissions, 72.6% in adults and 27.4% in paediatrics. The main method of communication was the computer on 408 occasions and telephone/personal in 165, depending on the urgency. The most frequent error was schedule (43%), not adjusting for nursing shifts, altering the administration of the medication. Those of active principle (26%) were due to drugs not included in the PTG and of those doses (18%) that were related to paediatric presentations. The inadequate form of administration was

also registered in 6%, being related to the prescription of medications not included in the PTG, requiring a complete description sensitive to faults in the prescription or transcription. Those of low posology (4%) were due to dose adjustment according to renal and hepatic functions, and those of high (3%) to shortening of the therapeutic interval. The ‘pharmaceutical performance’ included 63 PIs of therapeutic exchange and modified dosages in 29 cases. Acceptance was 97.5%, performing 98.6% immediately and 1.4% in a range of 8 hours. All these problems related to the medication were detected and corrected by pharmacists as the intermediate step between the medical prescription and the nursing administration.

Conclusion It has been shown that the review and validation of treatments significantly improves therapeutic safety, minimising the risk to the patient. These results provide quantifiable data to measure the activity of the clinical pharmacist, in addition to providing data on pharmacotherapeutic quality indicators.

REFERENCES AND/OR ACKNOWLEDGEMENTS

Database Pharmacy Unit.

No conflict of interest.

5PSQ-130 ANALYSIS OF RITUXIMAB OFF-LABEL USE

¹D Gonzalez Vaquero*, ²E Manzano López, ²G Gómic Rodríguez, ¹A Martos Rosa, ¹J Urda Romacho, ¹P Acosta Robles. ¹Agencia Pública Empresarial Sanitaria Hospital de Poniente, Pharmacy Department, El Ejido, Spain; ²Agencia Pública Empresarial Sanitaria Hospital de Poniente, Internal Medicine Department, El Ejido, Spain

10.1136/ejhp-2019-eahpconf.563

Background Rituximab is a monoclonal antibody indicated in Spain in adults with non-Hodgkin’s lymphoma, chronic lymphatic leukaemia, rheumatoid arthritis and granulomatosis with polyangiitis and microscopic polyangiitis.

Purpose To evaluate the use of rituximab in a district hospital in off-label conditions which did not respond to corticosteroids or immunosuppressants treatment.

Material and methods We carried out a retrospective observational study of the use of rituximab off-label from its inclusion in the pharmacotherapeutic guide of the hospital in 2009 until July 2018.

Data collected: number of patients, sex, age, diagnosis, previous treatment with rituximab, concomitant treatment with rituximab, treatment schemes and adverse effects 6 months after the start of treatment. Digital clinical history and external consultations application were used. Statistical analysis was performed with SPSS version 24.

Results Number of patients: 21. Sex: 11 (52.4%) males. Mean Age: 53.3 (21–80). Diagnostic groups: six patients (28.6%) developed glomerulonephritis, five (23.8%) lupus, five (23.8%) vasculitis for cryoglobulins and ANCA positive, three (14.3%) myositis and two (9.5%) pemphigus. Treatment prior to rituximab: all patients were treated with prednisone, 11 (52.4%) with mycophenolate mofetil, 10 (47.6%) with azathioprine, 10 (47.6%) with cyclosporine A, six (28.6%) with hydroxychloroquine, three (14.3%) methotrexate, two (9.5%) with tacrolimus, one (4.8%) with immunoglobulins and one (4.8%) with monoclonal antibodies. Concomitant treatment with rituximab: all patients had been treated with prednisone, five (23.8%) with hydroxychloroquine, five (23.8%) with azathioprine, four (19%) with mycophenolate

mofetil and two (9.5%) with tacrolimus. Treatment schemes: eight (38.1%) patients received 15 day cycles with a fixed dose of 1000 mg on days 1 and 15. Ten patients (47.6%) with 500 mg weekly for 4 weeks and three patients (14.3%) received doses of 875 mg/m² weekly for 4 weeks. Adverse reactions: 11 patients (52.4%) developed cytopenia. The most frequent cytopenia was anaemia: five patients 45.4%. Seven (33.3%) patients developed pneumonia or sepsis that required hospital admission. A case of atrial fibrillation was recorded. No reactions related to the perfusion of rituximab were recorded.

Conclusion The use of rituximab off-label has increased in recent years. It is therefore necessary to develop protocols to unify the criteria for use, evaluating its effectiveness and safety profile to increase the quality of care.

REFERENCES AND/OR ACKNOWLEDGEMENTS

No conflict of interest.

5PSQ-131 PHARMACOVIGILANCE 2018: SURVEY ON THE PERCEPTION OF PHARMACOVIGILANCE IN THE HOSPITAL – TOOLS TO ENHANCE ADVERSE DRUG REACTIONS REPORTING

E Guido*, C Martinelli, A Saccardi. Azienda Socio Sanitaria Territoriale di Mantova – Carlo Poma, Hospital Pharmacy, Mantova, Italy

10.1136/ejhp-2019-eahpconf.564

Background Hospital pharmacovigilance (PV) has always shown an irregular trend. High increases in the use of adverse drug reactions (ADR) reporting are often recorded during the times in which ad hoc surveillance projects are also carried out. There are several reasons: the lack of knowledge about the role of the PV, the underestimation of the iatrogenic illnesses, job organisation problems and the perception of PV as a merely bureaucratic procedure.

Purpose The purpose of the survey was to suggest the use of some practical and quick tools that could help the staff of the hospital reporting the ADRs in a continuous and spontaneous way, without interfering in the ordinary management of the patients.

Material and methods The entire hospital staff was asked to take part in a survey sent by company e-mail. The survey consisted of 15 questions, which the participants could answer online anonymously. The first part of the questionnaire concerned the meaning of ADR, while the second one examined useful tools for the encouragement of the surveillance. The results were analysed through Microsoft Excel and LimeSurvey.

Results Two-thousand, six-hundred and seventy-two surveys were collected, with a participation rate of 27.3%. The obtained data highlighted that only 31.23% of the participants knew the correct meaning of ADR: 69.32% of them had never reported an ADR.

The chance of notifying directly the ADRs to the Qualified Person Responsible for Pharmacovigilance (QPPV) by putting a tick in the software for the patients' management was evaluated positively by the participants. Moreover, 69.73% of the interviewed would find the presence of the QPPV inside the ward useful.

Conclusion The analysis of the results shows that the promotion of PV knowledge is strongly suggested. Supporting the

wards in the comprehension of the reporting procedures is considered rather important.

Furthermore, it is recommended to add a checkbox for the ADRs in the software for the patients' management to promote the use of such an activity in the long term. In addition, the QPPV should have access to medical reports and useful data so that thorough and high-standard ADR reports could be provided.

REFERENCES AND/OR ACKNOWLEDGEMENTS

Aliberti F, Ciociano N, Grisi L, et al. Hospital pharmacists can improve pharmacovigilance in the emergency room. *EJHP: Sci Pract* 2013;20:A30. https://ejhp.bmj.com/content/20/Suppl_1/A30.2

No conflict of interest.

5PSQ-132 ASSOCIATION BETWEEN ANTICHOLINERGIC BURDEN OF MEDICATIONS AND MORTALITY IN OLDER ADULTS: A SYSTEMATIC REVIEW

¹M Gutiérrez-Valencia*, ²M Castresana-Elizondo, ³MP Monforte-Gasque, ¹E Lacalle-Fabo, ⁴A Galbete, ⁵N Martínez-Velilla. ¹Complejo Hospitalario de Navarra, Pharmacy Department, Pamplona, Spain; ²Hospital Reina Sofía- Tudela- Navarra- Spain, Pharmacy, Tudela, Spain; ³Hospital San Juan de Dios, Pharmacy, Zaragoza, Spain; ⁴Navarrabiomed-Departamento de Salud-Upna, Statistics, Pamplona, Spain; ⁵Complejo Hospitalario de Navarra, Geriatric Department, Pamplona, Spain

10.1136/ejhp-2019-eahpconf.565

Background Anticholinergic burden of medications has been linked to a number of adverse outcomes in older adults. It has demonstrated a negative impact on health outcomes such as cognitive impairment or falls, and many studies have recently investigated the association with a higher risk of mortality, but findings are contradictory.

Purpose To summarise with a systematic review of the evidence regarding the association between the anticholinergic burden of medications and mortality in older adults.

Material and methods A scientific literature search was conducted to identify all relevant studies published from 2006 until May 2018, without applying language restrictions. Queries of the literature were performed using the electronic databases PubMed (MEDLINE), EMBASE, Web of Science, CENTRAL and PsycINFO. A combination of the following search terms was used: 'aged' AND 'anticholinergic' AND 'mortality'. Studies with any type of design and setting with participants of mean age 65 years or older were included.

Results Two-thousand and twenty-eight different studies were identified, and after a two-step review, 34 were finally included in the systematic review (total 1,142,613 participants, from 71 to 537,387). All of them were observational studies: one case-control study and 33 cohort studies (nine retrospective and 24 prospective). Fourteen different scales were used: Anticholinergic Risk Scale, Drug Burden Index and Anti-Cholinergic Burden Scale were the most commonly used. Thirteen studies were performed in a hospital setting, seven in nursing homes, seven in a community dwelling, four were population-based studies and the rest used mixed populations. Follow-up periods differed from length of hospital stay to 10 years. Eighteen of 34 studies found a significant association between the anticholinergic burden of medications and an increased risk of mortality, in different settings and