Aim and objectives To investigate the dose accuracy and dose precision attained after manipulation of a commercially available prednisolone tablet, and to compare the results with those previously found for aspirin, a drug substance where solubility may similarly be challenging.

Material and methods Prednisolone tablets: Prednisolon Alternova 5 mg, Alternova A/S. Instrument: UHPLC-system from Shimadzu Corp (Nexera, with prominence DAD detector).

Results After manipulation of Prednisolon Alternova 5 mg tablets, 92.2% (85.3–95.1%) of the intended dose was retrieved.

Conclusion and relevance After manipulation by dispersion and dose extraction, the prednisolone tablets were found to give doses within the limits of tablet fractions according to the European Pharmacopeia (85–115%). In contrast, conventional tablets containing aspirin (Aspirin ‘Bayer’ 500 mg), a slightly soluble drug substance, has previously been shown to have never exceeded 55% of the intended dose when a 10th of the tablet was extracted. This shows that knowledge about solubility is not always sufficient for estimating the suitability for manipulation of tablets.

REFERENCES AND/OR ACKNOWLEDGEMENTS

Conflict of interest No conflict of interest

Background and importance The current COVID-19 pandemic has resulted in the need to bring medications closer to patients treated in the outpatient units (OPU), and with it pharmaceutical telecare (PT) to avoid patients visiting the hospital.

Aim and objectives To analyse the degree of satisfaction of patients treated in the OPU after implementation of the PT procedure.

Material and methods In April 2020, PT was performed in those patients who had been sent home medication and who according to the pharmaceutical criteria was necessary. The PT survey included all patients who had been contacted by telephone regarding pharmaceutical criteria (initiation of treatment, second dispensing, change, complicated pattern or adhesion control). In May 2020, a closed response satisfaction survey was prepared with the following items: sex, age, pathology, opinion that deserves PT, opinion on the information provided by the pharmacist (clarity, resolution of doubts), possibility of alternant the face-to-face visit with PT and preference between phone call or video call. Responses to the degree of satisfaction were measured by an ordinal scale with five possible categories: very good, good, regular, bad and very bad. 85 patients were randomly selected. The surveys were conducted by telephone by OPU pharmacists, and clinical data were obtained from the external patient dispensing programme. The results were expressed in frequencies and percentages.

Results 52.9% were men, with a median age of 53 years (10–92). Most of pathologies were viral pathologies (29.4%) and malignant neoplasms (28.2%). 97.6% of patients considered the PT service to be ‘good’ or ‘very good,’ and 98.8% considered the information provided to be ‘good’ or ‘very good.’ 100% considered it appropriate to alternate face-to-face visits with PT. Media preference: 50.6% indifferent, 41.2% phone call, 8.2% video call.

Conclusion and relevance PT and the information provided was evaluated positively by most patients. All patients considered it appropriate to alternate face-to-face visits with PT. About half of the patients would prefer a PT by phone rather than a video call.

REFERENCES AND/OR ACKNOWLEDGEMENTS

Conflict of interest No conflict of interest

SASSAFRAS

Satisfaction of patients with pharmaceutical telecare

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Background and importance The current COVID-19 pandemic has resulted in the need to bring medications closer to patients treated in the outpatient units (OPU), and with it pharmaceutical telecare (PT) to avoid patients visiting the hospital.

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Conclusion and relevance PT and the information provided was evaluated positively by most patients. All patients considered it appropriate to alternate face-to-face visits with PT. About half of the patients would prefer a PT by phone rather than a video call.

REFERENCES AND/OR ACKNOWLEDGEMENTS

Conflict of interest No conflict of interest

Analysis of the medicines under additional monitoring authorised in the European Union from 2017 to 2019

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Background and importance The medicines under additional monitoring (MUAMs), identified with a black inverted triangle (▼), are subject to strict control for 5 years after their authorisation or until the European Medicines Agency (EMA) considers that they are safe.

Aim and objectives The main objective was to analyse the characteristics of the MUAMs authorised by the EMA from 2017 until 2019. We also evaluated whether additional measures should be implemented in the hospital pharmacy services to improve the follow-up of MUAMs.

Material and methods A descriptive analysis of the EMA’s MUAMs list was conducted, which was updated on 25 March 2020, limiting the authorisations from 1 January 2017 to 31 December 2019. The following aspects were studied: criteria for inclusion in the list, year of inclusion and marketing status in Spain. Post-marketing safety was also analysed by reviewing the information notes published by the Spanish Agency for Medicines and Health Products in these 3 years. The main limitation was the dynamism of the MUAMs list, which is updated monthly.

Results 181 MUAMs were studied; 33% were authorised in 2017, 44% in 2018 and 23% in 2019. The criteria for inclusion in the MUAMs list were: new active substances: 113 (62.4%); new biologicals: 55 (30.4%); post-authorisation security studies (PASS): 8 (4.4%); conditional authorisation and exceptional circumstances: 4 (2.2%); and security restrictions: 1 (0.5%). More than 60% of the...
MUAMs authorised between 2017 and 2019 were marketed in Spain, mostly antineoplastic and immunomodulatory drugs. During these 3 years, the AEMPS published 13 notes referring to MUAMs and they related to safety (30.7%), contraindications for use (30.7%), restrictions on use (23%) and informative notes (15.4%). Only two of these notes affected one of the authorised MUAMs from 2017 to 2019 (tofacitinib).

Conclusion and relevance The most frequent designated criteria were new active substance, followed by new biologicals, PASS and conditional/exceptional authorisations. The high number of MUAMs authorised each year in Europe and their special characteristics justifies the need to implement a circuit in the hospital pharmacy services that includes: sessions to remind staff of their importance, patient information sheets to reinforce greater follow-up and explain the most common adverse effects as well as a wider dissemination of information about restrictions of use and contraindications.

REFERENCES AND/OR ACKNOWLEDGEMENTS

Conflict of interest No conflict of interest

PHARMACEUTICAL ALGORITHMS TARGETING ANTICOAGULANT THERAPY: IMPACT OF AVICENNE CLINICAL DECISION SUPPORT IN PATIENT SAFETY

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Background and importance Anticoagulants are sources of iatrogenia when they are used, misused or not used, especially when medication errors are involved. The EAHF statement integrates pharmaceutical analysis into our practices mentioning that all prescriptions should be reviewed and validated as soon as possible by a pharmacist. Pharmaceutical analysis practice is highly variable. Clinical decision support systems have proven to be effective globally in reducing morbidity, improving the detection of drug related problems (DRP) and reducing adverse drug events and costs. The threefold alliance, AVICENNE, as a real time clinical decision support system, works on the patient’s data, pharmaceutical algorithms and Pharmaclass (Keenturtle-F).

Aim and objectives The aim of the study was present the ability of AVICENNE to detect DRP when working on anticoagulation therapy compared with other drugs.

Material and methods An observational prospective study was ongoing from January 2019 to September 2020 in 1600 beds. 20 to about 135 pharmaceutical algorithms encoded in Pharmaclass detected patients with an anticoagulant related problem. Guidelines structured the pharmaceutical analysis of selected DRPs analysed from anamnesis to transmission of the pharmaceutical interventions (PI). In the two algorithms, the number of accepted PI were collected via computerised patient order entries.

Results The data were collected over 260 non-consecutive days. Of 4121 alerts 1301 were about anticoagulant medications (31%) and 2820 about other medications (69%). DRP detection was better with the algorithm on anticoagulants than with the other algorithm (1029 (79%) vs 1271 (45%)) because of fewer technical false positives. Pharmacist issued 437 PI targeting anticoagulant medicines, of which 266 PI (61%) were accepted by physicians. On the other hand, 1075 transmitted PI resulted in 505 accepted PI (47%). The difference was statistically significant ($\chi^2=23.99; p<10^{-4}$). For both of the algorithms’ sets, transmission had the same importance: for the oral route, 29% vs 27%, respectively (NS). The acceptance rate was similar (81% and 75%, respectively (NS)).

Conclusion and relevance Algorithms about anticoagulant therapy medications were more efficient in the detection of DRP because of explicit clinical practice guidelines. The acceptance rate of PI by physicians was better. AVICENNE improved patient safety.

REFERENCES AND/OR ACKNOWLEDGEMENTS

Conflict of interest No conflict of interest

ANTICHOLINERGIC BURDEN AND RISK OF ADVERSE EVENTS IN PATIENTS FROM A SPANISH NURSING HOME

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Background and importance High anticholinergic burden (AB) has been associated with central and peripheral adverse events. Several anticholinergic scales were developed to estimate this AB. Patients residing in nursing homes are frequently prescribed a wide range of drugs but the rates of anticholinergic drug usage and the AB associated with these drugs have not been previously described.

Aim and objectives To study the anticholinergic prescription rates of patients residing in a nursing home and to compare the results from 10 different anticholinergic scales when estimating AB.

Material and methods An observational cross sectional study was carried out from June 2020 to September 2020 in a nursing home. Variables collected were: age, sex, number of drugs prescribed, number of anticholinergic drugs prescribed, anticholinergic drugs prescribed, AB and anticholinergic risk. Patients were classified as polymedicated if more than 5 drugs were prescribed and heavy polymedicated if more than 10 drugs were prescribed. AB and anticholinergic risk were estimated with 10 anticholinergic scales.

Results 156 patients, 59.3% men, median age 74.2 (IQR 67.4–82.8) years, were prescribed a median of 10 (range 0–26) drugs with 2 (0–6) of them with anticholinergic activity. 84.0% (n=131) of patients were polymedicated and 50.6% (n=79) were heavily polymedicated. The most frequently prescribed anticholinergic drugs were: furosemide (21.2%, n=33), tramadol (13.5%, n=21), lorazepam (14.7%, n=23), metformin (13.5%, n=21) and clorazepate (12.8%, n=20). Anticholinergic risk and anticholinergic drug burden of patients who were prescribed at least one anticholinergic drug are shown in table 1.