Conclusion

- Switching of BT in our hospital is common. The most frequent reasons were the loss or lack of response and the presence of adverse effects.
- In most of the cases, there was a change in the pharmacological target, although in recent published studies the proportion of TNF cyclers and MOA switchers is similar.¹
- Despite the switching of BT, the rate of response was high.
- Switching BT meant an increase to our budget.

REFERENCES AND/OR ACKNOWLEDGEMENTS

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No conflict of interest.

5PSQ-077 COST-EFFECTIVENESS OF BIOSIMILAR ETANERCEPT IN CLINICAL PRACTICE USE

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10.1136/ejhp-2019-eahpconf.510

Background Etanercept is a tumour necrosis factor (TNF) inhibitor indicated for active rheumatoid arthritis (RA) as monotherapy or in combination with methotrexate. Biosimilar drugs currently commercialised are Benepali and Erelzi.

Purpose To evaluate biosimilar etanercept effectiveness in patients with RA and calculate the saving due to use them versus the original drug.

Material and methods Retrospective observational study in a cohort of patients with RA treated with a biosimilar etanercept from January 2017 to August 2018. Data collected: drug, age, sex, dose, schedule, concomitant disease-modifying anti-rheumatic drugs (DMARD), previous biological drugs, treatment length, baseline and final disease activity score (DAS28). Data sources: electronic medical records and outpatients' electronic prescription. Costs considered were hospital average prices.

Results Thirty-two patients were included; but only 16 had DAS28 documented. 81.3% were female, median age 61 (IQR 50.75–66.75) years and median treatment duration 186 (IQR 107.25–263.75) days. All patients were treated with a concomitant DMARD. Baseline and final DAS28 means differences were statistically significant ($p=0.002$). 56.3% of patients were naive, whose DAS28 difference was statistically significant ($p=0.006$). Twenty-five per cent of patients received etanercept as a third line of treatment, with a DAS28 difference statistically not significant ($p=0.496$).

Eight (50%) patients received Benepali, 75% were female, median age 61 (IQR 54.00–66.25) years and median treatment duration 253.50 (IQR 212.50–418.50) days. Baseline and final DAS28 means differences were statistically significant ($p=0.014$).

Eight (50%) patients received Erelzi. 87.5% female, median age of 60.50 (IQR 46.00–69.00) years and median treatment duration of 143.50 (IQR 92.50–180.00) days. DAS28 difference was statistically not significant ($p=0.068$).

The use of biosimilar in these patients would suppose a saving of 27.47% versus the original drug (34.93% Benepali, 20% Erelzi).

Conclusion Effectiveness results were similar to the original drug. Both biosimilar drugs show a decrease in DAS28, although Erelzi was statistically not significant possibly because of its lower treatment length in this study. DAS28 difference was statistically significant in naive patients, however, in those who received more than two lines, there was not a decrease in this value.

The use of biosimilar drugs instead of original drugs entails an important saving.

These results require confirmation in long-term treatments.

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No conflict of interest.

5PSQ-078 MORPHINE OVERDOSE FROM ERROR INFUSION RATE WITH INTRAVENOUS PUMP: FEEDBACK EXPERIENCE AND ACTION PLAN

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10.1136/ejhp-2019-eahpconf.511

Background Syringe pumps (SP) are a vital tool for administering medicine, especially in palliative care. However, an infusion rate error can be fatal for patients. It is part of the 'never events' list (programming error of administration device).

Purpose An infusion rate error (7 mg/h administered versus 0.7 mg/h prescribed) on a SP of morphine in a palliative care patient was reported by the care team. The experience feedback committee (EFC) decided to clarify the error's circumstances in order to establish an action plan to prevent this error from ever happening again.

Material and methods The adverse event was analysed according to the Association of Litigation and Risk Management (ALARM) method.

The patient's medical file was investigated and six interviews with health professionals were conducted. We report successive steps of systemic analysis according to the ALARM process. Results of this analysis were presented at an EFC staff meeting and an action plan was established.

Results The immediate cause found was the infusion rate programming error of the SP. Five root causes were identified: SP installation; absence of using bolus function by nurses; lack of training for nurses; interruptions of tasks; and the delay between two infusion rate monitoring of the SP. An action plan has been drafted with seven main actions among which are: creation of simplifying instructions concerning SP's functions with the help of the biomedical unit and pharmaceutical laboratories, harmonisation of infusion rate monitoring in medicinal protocols and nurses training for intravenous devices used. For each of them a leader has been assigned and a deadline fixed.

Conclusion The infusion rate programming error of the SP is a 'never event' which requires the studying of causes and to establish preventive actions. The analysis of this adverse event and its presentation to the EFC led to the setting up of an action plan within our hospital. Such analysis helped to identify care management problems and their systemic causes. Thus it led to corrective measures in order to prevent such

events happening again. This multidisciplinary work is part of the quality approach and the patient safety management of our establishment.

REFERENCES AND/OR ACKNOWLEDGEMENTS

No conflict of interest.

5PSQ-079 THE USE OF FENTANYL SUBLINGUAL TABLETS IN A HOSPITAL

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10.1136/ejhp-2019-eahpconf.512

Background Fentanyl sublingual tablets are indicated for the management of breakthrough pain in cancer patients who are already receiving, and tolerant to, around-the-clock opioid therapy for persistent cancer pain.

Purpose To evaluate the use of fentanyl sublingual tablets in our hospital.

Material and methods Retrospective observational study from June 2017 to February 2018 where all hospitalised patients who were receiving sublingual fentanyl tablets were included.

A database was developed in which demographical data (age and sex), service of the prescribing doctor, prescribed doses and indication of sublingual fentanyl were collected.

Results We studied 164 patients in total, 80 (48.78%) were males and 84 (51.22%) were females with a median age of 60.25 years' old.

Ninety-six (58.54%) were cancer patients of which 79 (82.30%) were patients with breakthrough pain who were already in treatment with other opioids, eight (8.33%) had an established dose without condition of the pain the patient was suffering and nine (9.38%) did not have the prescription in their computerised clinical history.

The most diagnosed cancers in these patients were: 17 lung (17.70%), 11 colon (11.46%), eight pancreas (8.33%) and six mammary gland (6.25%).

The remaining 68 (41.46%) patients were not cancer patients. The most common pains for which sublingual fentanyl was used were: 13 (19.12%) postoperative pain, 10 (14.71%) rheumatoid pain, six (8.82%) diabetic foot disease, six (8.82%) ischaemias due to a vascular disease, five (7.35%) uncontrolled postpartum pain and four uncontrolled pain after a traumatism. Three (4.41%) of the non-cancer patients used sublingual fentanyl tablets with an established dose without a breakthrough pain.

In total, the prescription of fentanyl sublingual tablets in the computerised clinical history of the patients was not found 18 times (10.98%). The maximum number of tablets were not specified in 55 patients (33.54%).

The most common services that prescribed the medication were: 20 (29.41%) anaesthesia, 12 (17.65%) vascular angiology and 11 (16.18%) rheumatology.

Conclusion There are several patients in treatment with sublingual fentanyl that do not fit in its approved indication in our hospital.

Pharmacists must participate in the development of guidelines to ensure the indication of fentanyl sublingual tablets is correct and to try to decrease the drug dependence related to its uncontrolled use.

REFERENCES AND/OR ACKNOWLEDGEMENTS

I would like to express my gratitude to my co-workers for helping with this research.

No conflict of interest.

5PSQ-080 A STUDY ON RISK FACTORS ELICITING OPIOID ADVERSE REACTIONS IN ELDERLY MALES

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10.1136/ejhp-2019-eahpconf.513

Background Opioid administration for pain control and relevant reports of adverse reactions have rapidly increased in the last several decades. In particular, elderly patients with various underlying disorders are administered with multiple drugs and prone to drug-drug interactions, and special attention is necessary in prescribing opioids.

Purpose This study attempted to verify the incidence rates of opioid adverse reactions, the symptomatic manifestations and examine causative factors in elderly male patients.

Material and methods This retrospective study, conducted via electronic medical records, included a total of 320 male patients, 65 years' old or older, who had been prescribed with oral opioids in this hospital from 1 January to 31 December 2012. These participants were divided into two groups: group one for patients with adverse reaction manifestations (ARM) and another group for patients with no ARM. The correlations with age, body mass index, alcohol drinking and smoking, underlying diseases, previous opioid usage and concurrently-administered drugs were analysed.

Results Eighty-nine out of 320 patients (27.8%) developed adverse reactions. Among these adverse reactions, constipation was manifested in 36 patients (11.3%); gastrointestinal illness (27 patients, 8.4%); nausea and vomiting (24, 7.5%); dizziness (12, 3.8%); drowsiness and mental confusion (eight, 2.5%); voiding difficulty (seven, 2.2%); skin reaction (five, 0.6%); and others (31, 9.7%).

Malignancy (OR=0.305, 95% CI: 0.145 to 0.642) and prescription duration (OR=2.127, 95% CI: 1.137 to 3.980) were significant variables in opioid type. The occurrence rate of adverse reactions of morphine and that of oxycodone were 7.3 times (95% CI: 2.545 to 20.701) and 7.5 times (95% CI: 2.547 to 22.208) greater than that of codeine. In concurrent administration of two or more opioids, malignancy (OR=0.323, 95% CI: 0.169 to 0.617), prescription duration (OR=2.054, 95% CI: 1.149 to 3.673) and GABA analogue (OR=3.259, 95% CI: 1.777 to 5.977) were significant. The occurrence rate of adverse reactions of concurrent administration of two or more opioids was approximately 2.8 times (95% CI: 1.089 to 7.163) greater than that of a single opioid drug.

Conclusion In elderly male patients with opioid administration, factors that affected relatively lower development of adverse reactions were malignancy and codeine. Administrations of long-term opioids, concurrent GABA analogue and multiple opioids increase adverse reactions.

REFERENCES AND/OR ACKNOWLEDGEMENTS

Thanks to our head of the pharmacy department and hospital officials who have extended helping hands for this study.

No conflict of interest.