COMPARATIVE ANALYSIS OF EFFECTIVENESS
ESTIMATING THE ECONOMIC IMPACT OF
A148
EJHP
REFERENCES AND/OR ACKNOWLEDGEMENTS
within the first month after surgery.
rescue if more pain was experienced.
acetaminophen or dipyrone around-the-clock and a strong opioid as a
Conclusion
Most patients were prescribed a NSAID, acetaminophen or dipyrone around-the-clock and a strong opioid as a
Purpose
To determine patients who may benefit from the use of
Background
The sublingual sufentanil tablet system (SSTS) (Zalviso) is a new device for the management of postoperative pain.
Purpose
To determine patients who may benefit from the use of SSTS compared to the patient-controlled analgesia morphine device (PCA-M). Analyse the effectiveness of SSTS compared to PCA-M.
Material and methods
Observational and prospective study carried out in a private 300-bed hospital. The present study consisted of two arms, on the one hand were selected patients with PCA-M and on the other, patients with SSTS. The study period was from September 2017 to March 2018. In the present study were collected the type of surgery. The total AVS value (average of 3 days) of each patient was also determined. The AVS value was determined through a pharmaceutical interview. Study data were analysed with the SPSS program: the difference of means was calculated through the student t-test and the Mann–Whitney U test.
Results
Fifty-one patients were collected in the PCA-M group and forty-four in the SSTS group. The average age in the PCA-M group was 55 years, while the average age in the SSTS group was 50 years, with no significant differences between groups. Patients differed significantly between groups in the type of surgery: SSTS has been used more frequently in gynaecological surgery but less in neurosurgery than PCA-M. Groups also differed significantly in gender: SSTS has been administered mostly in females (65%) versus PCA-M (37%). The intensity of the pain prior to the use of the device was AVS 7 for both groups. On the first day after the device was used, the average AVS value in the SSTS group was 5 and in the PCA-M group 6 (P=0.24). On days 2 and 3 the intensity of pain was lower in the PCA-M group (AVS 3) compared with the SSTS group (AVS 4) (P=0.58). Sum of the AVS average value was 15 in the PCA-M group and 14 in the SSTS group (P=0.28).
Conclusion
According to the present study, both devices have similar effects in the reduction and management of post-operative pain through the AVS scale. The SSTS group slightly decreases pain faster than the PCA-M group, without significant differences. SSTS has been administrated mainly in gynaecology, while the PCA-M device has been administrated mainly in neurosurgery.
REFERENCES AND/OR ACKNOWLEDGEMENTS
Acknowledgement of the anaesthesia service.
No conflict of interest.

4CPS-169
COMPARATIVE ANALYSIS OF EFFECTIVENESS BETWEEN A PATIENT-CONTROLLED ANALGESIA MORPHINE DEVICE AND A SUBLINGUAL SUFENTANIL TABLET SYSTEM
D Serrano*, S Roig, J Fernandez, P Alonso. Pharmacist, Hospital Pharmacy – Centro Medico Teknon, Barcelona, Spain
10.1136/ejhp-2019-eahpconf.318

Background
The sublingual sufentanil tablet system (SSTS) is a new device for the management of postoperative pain.

Purpose
To determine patients who may benefit from the use of SSTS compared to the patient-controlled analgesia morphine device (PCA-M). Analyse the effectiveness of SSTS compared to PCA-M.

Material and methods
Observational and prospective study carried out in a private 300-bed hospital. The present study consisted of two arms, on the one hand were selected patients with PCA-M and on the other, patients with SSTS. The study period was from September 2017 to March 2018. In the present study were collected the type of surgery and pain intensity with the analogous visual scale of pain (AVS: 0: no pain; 10: maximum pain) in various situations: prior to the PCA-M/SSTS and on days 1, 2 and 3 after PCA-M/SSTS. The total AVS value (average of 3 days) of each patient was also determined. The AVS value was determined through a pharmaceutical interview. Study data were analysed with the SPSS program: the difference of means was calculated through the student t-test and the Mann–Whitney U test.

Results
Fifty-one patients were collected in the PCA-M group and forty-four in the SSTS group. The average age in the PCA-M group was 55 years, while the average age in the SSTS group was 50 years, with no significant differences between groups. Patients differed significantly between groups in the type of surgery: SSTS has been used more frequently in gynaecological surgery but less in neurosurgery than PCA-M. Groups also differed significantly in gender: SSTS has been administered mostly in females (65%) versus PCA-M (37%). The intensity of the pain prior to the use of the device was AVS 7 for both groups. On the first day after the device was used, the average AVS value in the SSTS group was 5 and in the PCA-M group 6 (P=0.24). On days 2 and 3 the intensity of pain was lower in the PCA-M group (AVS 3) compared with the SSTS group (AVS 4) (P=0.58). Sum of the AVS average value was 15 in the PCA-M group and 14 in the SSTS group (P=0.28).

Conclusion
According to the present study, both devices have similar effects in the reduction and management of post-operative pain through the AVS scale. The SSTS group slightly decreases pain faster than the PCA-M group, without significant differences. SSTS has been administrated mainly in gynaecology, while the PCA-M device has been administrated mainly in neurosurgery.

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Acknowledgement of the anaesthesia service.
No conflict of interest.

4CPS-170
ESTIMATING THE ECONOMIC IMPACT OF PHARMACIST-LED PRESCRIPTION ORDER VALIDATION OF OPIOID PRESCRIPTIONS IN A TERTIARY UNIVERSITY HOSPITAL
1,S Wuyts*, 1,PJ Cortoos, 1,K Vanhaecht, 1,C Ligneel, 1,H Collier, 2,A Dupont, 3,P Corru. 1,UZ Brussel, Pharmacy, Brussels, Belgium; 2,UZ Brussel, Clinical Pharmacology and Pharmacotherapy, Brussels, Belgium; 3,Kuleuven, Leuven Institute for Healthcare Policy, Leuven, Belgium
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Background
Opioids easily cause adverse drug events (ADEs) or therapeutic failure in cases of prescribing errors, resulting in increased costs for the hospital, patient and healthcare system. The clinical pharmacist can detect and resolve these errors by performing prescription order validation (POV). Little data is available on the economic impact of this service.

Purpose
To evaluate the cost-outcome of pharmacist-initiated interventions on opioid prescriptions during POV, in terms of cost savings and cost avoidance (CA) for the institution.

Material and methods
Pharmacist interventions in prescriptions of fentanyl, hydromorphone, methadone, morphine, oxycodone and pirirramid in a Belgian tertiary university hospital of 721 beds, UZ Brussel, were analysed (period 1 February 2017–31 January 2018). The potential drug cost without intervention was compared to the cost with intervention. An expert panel assessed the probability of ADE occurrence by assigning a probability estimate (PE) to every intervention. The ADE-CA was calculated by multiplying the PE of ADE and its potential cost savings. The probabilities were calculated according to a method proposed by the Belgian Healthcare Knowledge Centre by
the PE. The total benefit was calculated as the sum of the drug cost difference and the ADE-CA. Personnel costs were estimated and subtracted from the estimated benefit to assess the final cost-benefit. A sensitivity analysis was added to determine the impact of assumptions on PEs, CA and employer’s expenses.

Results In 3040 prescriptions, 94 interventions were registered. Posology-related DRPs were the most common (59%). Sixty-two per cent of the errors were assigned a PE of medium (30%) or high (32%) level. Total drug cost savings amounted to €395.30 (median €1.47/intervention, range -€21.01 to €67.23). After adding ADE-CA, we found a total benefit of €8,559.92 (cost-benefit ratio: 2.32). Mostly variations in the ADE-CA affected the outcome. A lower and upper limit of respectively -€1,386.56 and €27,307.49 were calculated.

Conclusion This is the first Belgian study to evaluate the POV of opioids as a profitable service for the hospital. Because of some limitations in the method, further refinements are required for more accurate results. These findings demonstrate that hospital management should also take into account the potential savings induced by clinical pharmacists and cannot only rely on limited government funding.

REFERENCES AND/OR ACKNOWLEDGEMENTS

None.

No conflict of interest.

THE CHOICE OF ANTIPELLEPTIC DRUG TREATMENT AFTER STATUS EPILEPTICUS

1L Horváth*, 2I Fekete, 3S Márton, 4K Fekete. 1University of Debrecen, Department of Pharmaceutical Surveillance and Economics, Debrecen, Hungary; 2University of Debrecen, Department of Neurology, Debrecen, Hungary; 3University of Debrecen, Faculty of Art-Institute of Political Science and Sociology, Debrecen, Hungary

Background Status epilepticus (SE) is a life-threatening situation, which urges prompt antiepileptic treatment and intensive care. In the past few years, newer types of antiepileptic drugs (AEDs) have become available for SE treatment as second- or third-line drugs. AEDs should be prescribed for patients surviving SE as maintenance therapy in order to prevent further seizures.

Purpose To assess the prescription pattern of older and newer types of AEDs and their probable influence on the outcome of treatment (mortality and seizure freedom) after SE.

Material and methods Patients’ data were retrieved from patients’ files covering the period 1 January 2013 to 31 December 2017 in a retrospective study of patients who were treated and coded with SE diagnoses in accordance with the International Classification of Diseases by the WHO at the neurointensive unit of a tertiary teaching hospital. The end of follow-up was 30 June 2018.

Results In total 135 episodes (male: 68, 50.4%) were evaluated. The mean age was 64.1±13.9 years. The mean follow-up time was 39.9±14.2 months. Patients who survived SE (101 patients) took one (48.5%), two (36.6%) and three or more (14.9%) AEDs (49, 37 and 15 patients, respectively) at discharge to maintain freedom from seizures. The most common prescribed older type AEDs were carbamazepine and valproate. The prescriptions of newer type AEDs (60.3%; e.g. levetiracetam, oxcarbazepine, lamotrigine and lacosamide) were significantly higher at discharge than at admission (p<0.005). The mean seizure-free period was 6.8±6.9 months (the shortest seizure-free time was 1 day and the longest one was 5 years). In the case of patients taking carbamazepine (20.9%; OR: 0.37, 95% CI: 0.16 to 0.82; p=0.018), levetiracetam (27.5%; OR: 0.51, 95% CI: 0.27 to 0.97; p=0.041) or valproate (11.1%; OR: 0.18, 95% CI: 0.05 to 0.61; p=0.0043) had the highest probability of achieving seizure freedom among our patients. The choice of AED at discharge had no significant effect on mortality. Twenty-five patients had no seizure until the end of this study. Thirty-one patients (30.7%) died after the discharge period primarily due to co-morbidities.

Conclusion The administration of newer type AEDs in SE treatment may have an impact on the prescription pattern after discharge, however older type AEDs (carbamazepine, valproate) are a reasonable choice in achieving seizure freedom after SE.

REFERENCES AND/OR ACKNOWLEDGEMENTS

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No conflict of interest.

IMPACT OF MEDICATION RECONCILIATION IN PATIENTS ON ADMISSION TO AN EXPERT CENTRE FOR PARKINSON’S DISEASE

1VNail*, 1C Dubrou, 1M Dulac, 2JP Azulay, 1GHache. 1University Hospitals of Marseille, Pharmacy, Marseille, France; 2University Hospitals of Marseille, Neurology, Marseille, France

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Background Parkinson’s disease (PD) is a long-term neurodegenerative disorder, whose onset appears usually after 60 years’ old. Patients often suffer from co-morbidities and have a complex medication regimen. Thus, iatrogenic risk is very high in these patients. In France, there are 25 expert tertiary centres for PD but no data about medication reconciliation (MR) for the patients hospitalised in these centres are currently available.

Purpose To implement the MR process at admission to an expert centre for PD and to assess its impact.

Material and methods The study was conducted prospectively from January 2017 to June 2018. We included all patients over 65 years’ old, admitted in an expert centre for PD in southern France. At admission, we obtained a complete and accurate list of each patient’s current home medications (name, dosage, frequency, route) i.e. the best possible medication history (BPMH). Then we compared the BPMH to the patient’s admission order, identified discrepancies, qualified them as intentional or unintentional with the prescriber, and suggested changes in the prescription, if appropriate. The primary endpoint was to determine the number of patients with at least one unintentional medication discrepancy (UMD). Secondary objectives were to characterise and estimate the severity of potential consequences of UMDs according to Dufay et al1 and assess the rate of acceptance of suggested modifications.

Results We included 266 patients. Two-hundred and eighty-two UMDs were identified and 114 patients (43%) had at least one UMD. The most frequent UMD was omission of medication (68%). Interestingly, 34% of UMDs affected neurology drugs, including 8% for anti-Parkinson’s drugs. The severity of potential consequences was estimated ‘serious’ in 10% of UMDs. Seventy-six per cent of the modifications suggested were accepted by prescribers.