

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.

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4CPS-171 THE CHOICE OF ANTIPILEPTIC DRUG TREATMENT AFTER STATUS EPILEPTICUS

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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.

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4CPS-172 IMPACT OF MEDICATION RECONCILIATION IN PATIENTS ON ADMISSION TO AN EXPERT CENTRE FOR PARKINSON'S DISEASE

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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 al*¹ 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.

Conclusion The proportion of patients with at least one UMD, combined with the high rate of acceptance of suggested modifications validated the relevance of MR at admission in an expert centre for PD. Interestingly, a high rate of UMD occurred for neurologic drugs, which may have affected the neurologic assessment.

REFERENCES AND/OR ACKNOWLEDGEMENTS

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4CPS-173

8 YEARS' EVOLUTION OF ANTIPSYCHOTICS PRESCRIPTIONS IN A MENTAL HEALTH PUBLIC INSTITUTION

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Background Our hospital is a public mental health institution of 806 inpatient beds and 962 medical and social care places. Antipsychotics (APs) are used mainly in schizophrenia and bipolar disorder, and represent one of the most prescribed pharmacological classes in our hospital.

Purpose The aim of this study was to assess the compared evolution of APs prescriptions to one another over the period 2010–2017.

Material and methods An extraction of the consumption of all APs between 2010 and 2017 was performed. The defined daily dose (DDD) established by the World Health Organisation was used for the analysis. These were expressed in number of DDD/1000 days of hospitalisation (DH) to consider the evolution of the hospital's activity during the study period.

Results A total of 22 molecules were studied (six second-generation AP-SGA- and 16 first-generation AP-FGA). The most consumed molecules were loxapine, olanzapine, cyamemazine and risperidone. Since 2010, the consumption of FGAs has decreased by 23.5% in favour of SGAs (45.4% increase). Some APCs are almost no longer prescribed (pipotiazine, pimozide) and some SGAs are increasingly used (long-acting olanzapine, long-acting paliperidone). The top prescribed SGAs are olanzapine (437 DDD/1000DH, 17.3% increase), risperidone (320 DDD/1000DH, 8% decrease) and clozapine (218 DDD/1000DH, 23% increase). Regarding FGAs, despite a slight decrease in consumption, zuclopentixol, haloperidol and flupentixol are still frequently prescribed (approximately 140 DDD/1000DH). Finally, we observed a 16% increase in depot forms and a 5% decrease in immediate-release forms.

Conclusion As consumption in our hospital shows, loxapine and cyamemazine are mainly used in patient's sedation. The increased SGAs use reflects international recommendations for the use of SGAs as first-line treatment based on the drug's superior tolerability and a greater efficacy on negative symptoms. Surprisingly, olanzapine is the molecule with the highest DDD/1000DH: this may be related to psychiatrists' practices in our hospital and the use of significantly higher doses than DDD. This study allowed us to assess the evolution of APs consumption in our hospital, which confirms the predominant use of SGA and the use of extended-release forms. However, we can question the

relevance of DDDs in psychiatry given the variability of APs doses used according to the molecules and psychiatrists' patterns.

REFERENCES AND/OR ACKNOWLEDGEMENTS

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4CPS-174 A NEW BREATH FOR CLOZAPINE ...

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Background Clozapine, the first atypical neuroleptic (NL) marketed has had to compete with other NL medications, better tolerated and without any prescription constraints.

Purpose In order to understand the situation of clozapine today, a study reviewed clozapine prescriptions (Q1 and Q2 of 2018) and a perception survey with the hospital's psychiatrists.

Material and methods A computerised extraction of hospitalised patients receiving clozapine from January to June 2018 was performed. The criteria collected were: age, gender, indication, previous treatment and coprescription. The survey investigated the prescription modalities: practice, average dosage (AD), adverse events (AE), efficacy and opinion about the risk management plan (RMP).

Results The study retrieved 13 patients (four females; nine males), average age 59.7 years. Schizophrenia was diagnosed for seven of them (AD 350 mg), and a Lewy Body Dementia (LBD) (AD 31 mg) for the six others. Clozapine dosage for LBD never exceeded 50 mg per day. For schizophrenia, clozapine was prescribed in the third or fourth line due to the previous treatment inefficacy (linked to noncompliance in 60%). Clozapine was maintained from 10 months to 4 years. Eight psychiatrists answered our survey: risperidone was favoured (6/8) for its sustained-release formulation and clozapine was prescribed in the third line (5/8). Sedation, hypersialorrhoea and priapism were reported by three psychiatrists and one reported agranulocytosis. Clozapine was judged effective (5/8) to very effective (3/8) and the RMP did not limit the prescription (8/8). The prescription of clozapine fulfilled the official recommendations and the AE were already described in the literature. Our study concerned hospitalised patients, unrepresentative of those who were followed up by the Medico-Psychologic Centre (38 patients). Its use is positively perceived by psychiatrists. Nonetheless, the quality of the doctor-patient relationship influences compliance because hospitalisation for starting therapy and medical monitoring are needed. On the other hand, patients responding to treatment can be stabilised for many years. In a word, the psychiatrists prefer a sustained-released formulation (one tablet per day) and lighter medical monitoring.

Conclusion Patient's acceptance of clozapine is a *sine qua non* condition for a successful therapy. Its efficacy can predict an earlier and frequent use.

REFERENCES AND/OR ACKNOWLEDGEMENTS

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