dry DMLA. Dyschromatopsia was confirmed by poor results on Ishihara test (1/13 OU). Computerized visual field results revealed nonspecific diffuse alterations. Full-field electroretinogram (ERG) showed moderate diffuse rod and cone dysfunction. Visual symptoms progressively improved over the next 2 months, but ERG did not. Complete resolution was not expected due to the pre-existing eye disease. The patient was finally discharged home after a 3-week hospital stay.

**Conclusion:** Digoxin intoxication can go unrecognized by clinicians, even in a typical presentation. The range of potential visual symptoms is far greater than isolated xanthopsia (yellow vision) classically described in textbooks. Newly introduced drugs and all symptoms must be actively sought after, because they significantly affect quality of life and global functioning, especially in the elderly population, most liable not to mention them.

**Disclosure of Interest:** None declared.

**PP018—STORAGE AND WASTAGE OF ANTIBACTERIAL AGENTS IN HOUSEHOLDS IN NOVI SAD, SERBIA**

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**Introduction:** Worldwide data indicate that antibiotics are frequently used inappropriately. Inappropriate use of antibacterial agents may lead not only to unfavorable medical consequences but also to substantial ecological and economic consequences. The objective of this study was to investigate the extent of storage and wastage of antibacterial agents in households in Novi Sad, Serbia.

**Patients (or Materials) and Methods:** The study was performed in an 8-month period (December 2011–July 2012) among households in Novi Sad, Serbia. The households were randomly selected from the telephone directory. The investigator informed the respondents about the aim of the study and asked if they agreed to participate. After that, the interviewer performed the survey by visited each household. During the visit, the presence or absence of antibiotics was checked, and the respondent was interviewed.

**Results:** The total number of antibacterial agents in the 383 surveyed households was 318, constituting 7.5% of the total stored medications. From 383 families included in the study, antibiotics were found in 178 (46.5%). In 13 (7.3%) families were found >1 pack of the same antibiotics. The median number of antibacterial agents per household was 1 (range, 1–5). The most common antibacterial agents encountered were cephalixin (21.4%) and amoxicillin (18.8%), followed by doxycycline, amoxicillin/clavulanic acid, and sulfamethoxazole/trimethoprim (10.1%). There was no statistically significant difference in the number of antibacterial agents between families with or without children under 12 years in the family (P = 0.218). The number of family members and the number of medications in the family were significantly and positively (P = 0.014 and P < 0.001, respectively) correlated with the number of antibacterial agents found in the households. Wasted antibacterial agents, defined as those that had expired, were 20.8%. The percentage of antibacterial agents that were not currently in use was 85.2%. Estimated total value of antibacterial agents found in the study was 892.52 € per household.

**Conclusion:** Antibacterial agents were commonly encountered in Serbian households, and a relatively large percentage was being wasted. Informational and educational activities aimed at improving the public’s knowledge about antimicrobials play the leading role in reducing imprudent use of antibiotics.

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**Disclosure of Interest:** None declared.

**PP020—EFFECTS OF ARIPIPRAZOLE AND RISPERIDONE ON VENTRICULAR REPOLARIZATION IN CHILDREN AND ADOLESCENTS**

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**Introduction:** Atypical antipsychotics (AP) are increasingly being used in children and adolescents for the treatment of psychiatric disorders such as psychoses, autism, attention-deficit/hyperactivity disorder (ADHD), and aggressive behavior. Atypical AP may cause QT prolongation on the electrocardiogram (ECG), which predisposes patients to an increased risk of developing threatening ventricular arrhythmias. Although this phenomenon has been exhaustively reported in adults, few studies investigated the safety of these drugs in pediatric patients.

**Patients (or Materials) and Methods:** We performed an open-label, prospective study to assess the arrhythmic risk of aripiprazole and risperidone in pediatrics. A total of 60 patients (55 M/5 F; mean age, 11.8 [3.27] years; range, 3–17 years), receiving a new prescription of aripiprazole or risperidone in monotherapy underwent a standard ECG before and after 2 months from the beginning of antipsychotic treatment. Basal and posttreatment ECG parameters, including mean QT (QTc) and QT dispersion (QTd) interval duration, were compared within treatment groups.

**Results:** Twenty-nine patients were treated with aripiprazole (mean dosage, 7.8 [3.2] mg/d) and 31 with risperidone (mean dosage, 1.7 [1.1] mg/d). Although no patients exhibited pathologic values of QTc or QTd, treatment with risperidone was associated with a significant increase of both QTc and QTd values (407.4 [11.9] ms vs 412.4 [10.3] ms, P = 0.03; and 40.0 [4.4] ms vs 44.7 [5.5] ms, P = 0.0001, respectively). Conversely, treatment with aripiprazole was associated with a statistically significant increase of QTd (40.6 [6.5] ms vs 46.3 [7.2] ms, P = 0.0001) in presence of an unmodified QTc. Moreover, in patients treated with aripiprazole, a significant decrease in heart rate was observed after treatment (90.0 [21.2] beats/min vs 79.8 [19.3] beats/min; P = 0.0003).

**Conclusion:** The present study provided important advances in the assessment of the cardiologic safety of second-generation AP during the pediatric age. Indeed, the treatment with risperidone and aripiprazole was associated with modifications of the QTc on ECG, thus indicating that these drugs can exert a substantial effect on the ventricular repolarization. Our study remarks the importance to perform an ECG examination in all patients undergoing AP therapy. Both QTc and QTd evaluation should be performed to warranty a reliable assessment of drug-induced QT prolongation. Caution should also be exercised in prescribing aripiprazole in patients at risk of bradycardia.

**Disclosure of Interest:** None declared.
INTOXICATION: A CASE REPORT

Disclosure of Interest: None declared.

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15 mg/L. In our patient, levels fell to 80% fall in plasmatic levels observed during each HD session is estimated creatinine clearance of 13 mL/min (Cockroft formula). Two hours later, she was transferred to a neurocritical care unit because of acute aphasia, myoclonic jerks, and delirium with a Glasgow coma scale score of 12/15. The following day, in the absence of other causes, cefepime intoxication was hypothesized, and cefepime was withdrawn after a total of 7 doses = 14 g. Over the next 24 hours, two 3-hour hemodialysis (HD) sessions were performed under cefepime concentration monitoring.

Results: Cefepime plasma levels were measured by liquid chromatography/mass spectrometry. There is no validated reference range, but a study (Chapuis T et al, Critical Care, 2010) found a 50% risk of neurotoxicity with residual levels >15 mg/L. In our patient, levels were 83.3 mg/L 10 hours after last dose, 24.1 mg/L immediately after the first HD session, 13.4 mg/L immediately before the second HD session, and 2.5 mg/L immediately after the second HD session. The patient made a full clinical recovery over the next 48 hours. The 70% to 80% fall in plasmatic levels observed during each HD session is in accordance with literature data (Schmaldienst S et al, Eur J Clin Pharmacol, 2000, and Manyor LM et al, Pharmacotherapy, 2008). According to kinetic simulation, cefepime dropped at a concentration <15 mg/L 15 hours earlier with HD than it would have without.

Conclusion: Neuropsychiatric adverse effects of beta-lactam antibiotics can be easily overlooked by clinicians. One should be especially cautious with their use in very old and frail patients in whom plasma creatinine poorly estimates renal function and cognitive impairment is highly prevalent. Temporary hemodialysis effectively clears cefepime, but its role in hastening clinical recovery may be limited.

Disclosure of Interest: None declared.

PP022—VARIATIONS IN DRUG-INDUCED LIVER INJURY (DILI) BETWEEN DIFFERENT PROSPECTIVE DILI REGISTRIES

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PROSPECTIVE DILI REGISTRIES LIVER INJURY (DILI) BETWEEN DIFFERENT

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None declared.

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Introduction: Hospitalization due to adverse drug events (ADE) is a well-known problem. According to the literature ADE are the reason for ~5% of hospitalizations. Recent pharmacoepidemiologic studies raised concern regarding the long-term safety of antipsychotic and antidepressant drugs. It was the aim to analyze the involvement of psychotropic drugs in ADE of patients presenting at an emergency department (ED).

Patients (or Materials) and Methods: In this prospective observational study, nontraumatic patients presenting at the ED of a tertiary care university teaching hospital were evaluated in 3 study phases by intensive chart review by an interdisciplinary expert panel to detect and classify all ADE.

PP023—HEMODIALYSIS FOR CEFEPIME INTOXICATION: A CASE REPORT

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Introduction: We report a case of cefepime intoxication with acute severe neurologic symptoms, which was treated by temporary hemodialysis.

Patients (or Materials) and Methods: Cefepime 2 g BID for endovascular prostheses infection was prescribed to a frail, chronically ill 88-year-old woman with a serum creatinine of 199 µmol/L and an estimated creatinine clearance of 15 ml/min (Cockcroft formula). Two days later, she was transferred to a neurocritical care unit because of acute aphasia, myoclonic jerks, and delirium with a Glasgow coma scale score of 12/15. The following day, in the absence of other causes, cefepime intoxication was hypothesized, and cefepime was withdrawn after a total of 7 doses = 14 g. Over the next 24 hours, two 3-hour hemodialysis (HD) sessions were performed under cefepime concentration monitoring.

Results: Cefepime plasma levels were measured by liquid chromatography/mass spectrometry. There is no validated reference range, but a study (Chapuis T et al, Critical Care, 2010) found a 50% risk of neurotoxicity with residual levels >15 mg/L. In our patient, levels were 83.3 mg/L 10 hours after last dose, 24.1 mg/L immediately after the first HD session, 13.4 mg/L immediately before the second HD session, and 2.5 mg/L immediately after the second HD session. The patient made a full clinical recovery over the next 48 hours. The 70% to 80% fall in plasmatic levels observed during each HD session is in accordance with literature data (Schmaldienst S et al, Eur J Clin Pharmacol, 2000, and Manyor LM et al, Pharmacotherapy, 2008). According to kinetic simulation, cefepime dropped at a concentration <15 mg/L 15 hours earlier with HD than it would have without.

Conclusion: Neuropsychiatric adverse effects of beta-lactam antibiotics can be easily overlooked by clinicians. One should be especially cautious with their use in very old and frail patients in whom plasma creatinine poorly estimates renal function and cognitive impairment is highly prevalent. Temporary hemodialysis effectively clears cefepime, but its role in hastening clinical recovery may be limited.

Disclosure of Interest: None declared.

PP024—ADVERSE DRUG EVENTS AND MEDICATION ERRORS RELATED TO PSYCHOTROPIC DRUGS IN PATIENTS PRESENTING AT AN EMERGENCY DEPARTMENT

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Introduction: Hospitalization due to adverse drug events (ADE) is a well-known problem. According to the literature ADE are the reason for ~5% of hospitalizations. Recent pharmacoepidemiologic studies raised concern regarding the long-term safety of antipsychotic and antidepressant drugs. It was the aim to analyze the involvement of psychotropic drugs in ADE of patients presenting at an emergency department (ED).

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