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

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Introduction: DILI differs across geographical areas due to differential drug polices, prescription habits, drug consumption, and genetic factors. In this study, we have compared DILI cases included in the recently established Latin American DILI Network with those in the Spanish DILI Registry and the US Drug-Induced Liver Injury Network to identify differences in phenotypic presentations and causative agents.

Patients (or Materials) and Methods: Demographic, clinical parameters, and causative agents were compared between 98 Latin American, 851 Spanish, and 300 US DILI cases.

Results: The Latin American cases had a mean age of 54 years with a predominance of females (61%), whereas mean age and female proportion in the Spanish and US DILI cases were 54 years with 49% females and 48 years with 60% females, respectively. The most common type of liver damage in all 3 registries was hepatocellular injury. Jaundice was frequently seen in the registries, with 70%, 66%, and 69% of the Latin American, Spanish, and US DILI cases, respectively. Hospitalization occurred in 51% of the Latin American DILI cases, with 57% and 60% of the Spanish and US cases requiring hospitalization. Liver-related death or liver transplantation occurred in 5.1%, 3.6%, and 6.0% of the Latin American, Spanish, and US cases, respectively. The main causative agents in Latin America included nimesulide, diclofenac, nitrofurantoin, cyproterone acetate, and various herbal remedies, whereas amoxicillin-clavulanate predominated in the other 2 registries, followed by ibuprofen in Spain and nitrofurantoin in the United States.

Conclusion: The Latin American DILI cases demonstrate similar phenotypic characteristics as observed in registers outside Latin America with respect to type of injury and severity. Female sex predominates in the Latin America and US registries. With regard to causative agents, elevated representation of NSAIDs, hormonal treatments, and herbal remedies were seen in Latin America, whereas antibiotics were more common causes of DILI in Spain and the United States.

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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 prosthesis 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 13 mL/min (Cockroft 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.

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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).

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.