Are Non-Serious Adverse Reactions to Psychiatric Drugs Really Non-Serious?

Marco Pozzi, Silvana Bertella, Dario Cattaneo, Massimo Molteni, Valentina Perrone, Carla Carnovale, Stefania Antoniazzi, Emilio Clementi, and Sonia Radice.

Journal of Child and Adolescent Psychopharmacology. August 2013, 23(6): 394-400. doi:10.1089/cap.2012.0094.

Objective: The EudraVigilance Pharmacovigilance system classifies the seriousness of adverse drug reactions (ADRs) based on the requirement of hospital care. To date, no systematic study has been conducted on the impact of non-serious ADRs, in terms of therapy continuation and course of the underlying disease. We analyzed a pediatric population receiving psychiatric care and subjected to drug treatment, to assess whether non-serious ADRs do or do not have a relevant clinical impact.

Methods: Data from a 1 year period were collected, which included: Administered drugs, choices made to manage the ADRs, the long-term (6 month) effect of these interventions on the course of the reaction, and their impact on the drug treatment for the underlying pathology.

Results: Observed ADRs were concordant with those previously described for the same drug classes, and mainly comprised alterations of behavior, mood, and sleep (53%) and excessive variations of appetite and body weight (39%). The type of drug influenced the management decision, as we found that drug discontinuation was the most frequent strategy employed to resolve ADRs, especially with drugs employed in the treatment of attention-deficit/hyperactivity disorders (63%, $p<0.05$), whereas management of antipsychotics mainly relied upon drug substitution (21%, $p<0.01$). Also, the type of ADR influenced the management decision, as alterations of behavior, mood, and sleep were seldom managed by maintaining the drug unchanged (10%, $p<0.05$), at variance with appetite/weight alteration ADRs (unchanged in 41%, $p<0.01$). Follow-up information revealed that drug discontinuation was most efficient at treating ADRs (no persistent ADRs, $p<0.01$), but had a severe impact on the course of the underlying psychiatric disease. Conversely, management of ADRs by maintaining the original drug even if at different dosage did not lead to an amelioration of the reactions; however, as it caused a significant clinical improvement (83%, $p<0.04$) that superseded the ADR in terms of clinical benefit.

Conclusions: These data suggest that the best strategy to improve both ADR management and the clinical course of patients is to limit, whenever possible, changes to the original therapy. Optimization of the actual therapeutic regimes also might benefit from development of specific pharmacokinetic and pharmacodynamic monitoring programs.