

12 Allergic Reactions to Oral Drugs: A Case/Non Case Study from an Italian Spontaneous Reports Database (GIF)

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Despite the wide number of studies investigating on drug-induced allergy, limited data focused on allergies associated with orally administered drugs are available.

The aim of the study is to evaluate allergic drug reactions associated with oral drug use, using an Italian spontaneous reporting database of adverse drug reactions (ADRs).

Spontaneous reports associated with oral drugs retrieved from seven Italian regions (GIF research group), collected from 1988 to 2006, were analysed. Association between drugs and allergic adverse reactions was assessed using the case/non case method, calculating the ADR reporting odds ratio (ROR) as a measure of disproportionality.

Overall, 27,175 reports of adverse reactions related to oral drug use were analysed; of these, 3,143 (11.6%) were judged as allergy cases. Paediatric patients (<15 years) and in-patients ($p < 0.001$) were more represented in cases than in non-cases. Antibiotics and Non-Steroidal Anti-inflammatory Drugs (NSAIDs) were the only two drug classes associated with a significant increase of ROR. Regarding antibiotics, cinoxacin (6.88; CI95% 4.19-11.29) and moxifloxacin (4.20; CI95% 3.19-5.55) were related to the highest ROR values, while propionic acid derivatives (ROR 2.75; CI95% 2.30-3.28), and in particular ibuprofen (4.20 CI95% 3.13-5.63), have shown the highest ROR values among NSAIDs.

The results confirm the higher frequency of allergic reactions with oral antibiotics and NSAIDs, although more data are needed. Given the widespread use of these drug classes (some of them being purchased as over the counter drugs), awareness should be raised among patients and prescribers about these non-unusual risks.

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