

Drug eruption to quetiapine and olanzapine with cross-reactivity: A case report

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Introduction: Although drug eruption is a common drug side effect, little is known in the cases caused by atypical antipsychotics such as olanzapine, clozapine and risperidone. Cases triggered by multi-drugs, especially, have been rarely seen. Herein, we reported a case of drug eruption caused by quetiapine and olanzapine.

Case: An 85-year-old male patient with diabetes and dementia was hospitalized due to sepsis from acute cholecystitis. While receiving urgent treatment, he suffered from delirium and quetiapine 37.5mg was administered. Few days later, he experienced maculopapular eruption on the whole body. This symptom appeared solely without pruritus, pain and mucosal involvement. Eosinophilia was confirmed with AEC 620/ul and the total IgE was increased to 500kU/L. Quetiapine was suspected as the causative agent, therefore it was discontinued. After applying systemic steroid for 5 days, skin eruption had been improved. Because delirium was not resolved, the antipsychotic drug was switched to olanzapine 7.5mg. After administration of the alternative antipsychotic drug for 3 days, the skin lesion became worse. Olanzapine was discontinued because it was also suspected as the culprit drug, and additional administration of systemic steroid was applied for 1 week. After 2 weeks, the patient recovered from the eruption, and a patch test was performed for olanzapine, clozapine, quetiapine, and risperidone. The skin test result was non-reactive in four agents, and 1 mg of risperidone was administered for 3 days, which did not result in skin eruption.

Discussion: There are only a few case reports of skin reactions to atypical antipsychotics, especially there was no case of drug eruption on both quetiapine and olanzapine. In this patient, considering the possibility that the benzodiazepine structure may cause an allergic reaction, it was speculated that risperidone was less likely to cause hypersensitivity reactions and the results were as expected.

Conclusion: The potential for cross-reactivity between quetiapine and olanzapine should be considered if alternative drugs should be selected for a drug eruption due to atypical antipsychotics.



Figure 1. Patient's generalized maculopapular eruption findings



Figure 2. Patch test¹⁾

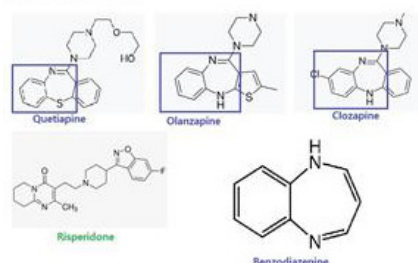


Figure 3. Chemical structure of antipsychotics