

## Letter to the Editors

### Risperidone-induced recurrent giant urticaria

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Psychotropic drugs such as olanzapine [1], droperidol [2, 3], chlorpromazine [4], clozapine [5–9] and risperidone [10, 11] have been known to cause drug rashes and cutaneous eruptions. These can have various degrees of severity ranging from generalized cutaneous rashes (50–95%) and urticaria (5–22%) to more severe lesions which warrant emergency attention, such as angio-oedema, acute generalized exanthematous lesions, toxic epidermal necrolysis and 'Steven–Johnsons' syndrome [12]. Urticaria can manifest as anything from mild erythematous, pruritic lesions to involvement of subcutaneous tissue and, in extreme cases, life-threatening anaphylaxis [12]. We report a patient who developed giant urticaria following treatment with risperidone which resolved rapidly on discontinuation of the drug and which recurred on rechallenge.

A 46-year-old male diagnosed with undifferentiated schizophrenia was started on risperidone 3 mg day<sup>-1</sup> after a history of poor response to various typical antipsychotics including trifluoperazine and pimozide. Within 3 days of starting risperidone, he developed an erythematous pruritic and painful rash over the face and neck. No soft tissue swelling was present. An in-house dermatological consultation diagnosed it as giant urticaria. Risperidone was stopped and the patient was treated with steroids and antihistamines for 5 days, after which the lesions disappeared. A rechallenge with risperidone was not done on ethical grounds. He was then maintained on chlorpromazine 300 mg day<sup>-1</sup> and depot fluphenazine. Other antipsychotics were not considered because of financial reasons. However, due to poor response, guardians of the patient requested risperidone to be restarted even after being informed of the possible complications. Risperidone was therefore restarted. He again developed symptoms and signs of giant urticaria. Risperidone was stopped, he was treated with steroids and antihistamines and, within 5 days, the urticaria

disappeared. He was discharged on fluphenazine depot. On evaluation with the Naranjo algorithm [13], we obtained a score of 10, which is highly probable that the adverse reaction was caused by the drug.

Urticaria has various causes but drug-induced urticaria is believed to be IgE mediated with a link to the major histocompatibility complex allele, HLA-DRB1\*. The drug acts as an allergen, triggering IgE-mediated degranulation of mast cells, causing release of histamine and a spectrum of skin manifestations [14]. Urticaria is a condition characterized by local elevated ridges (weals) and erythema of the skin. Giant urticaria is a more severe form which is larger in size than papular urticaria or 'hives' [15]. Angio-oedema, however, is the presence of urticaria along with involvement of subcutaneous tissue resulting in additional painful oedema [16]. However, differentiation is usually difficult as both may coexist and overlap [17]. Our patient, unlike the previous reports, developed only a limited erythematous skin reaction without the presence of subcutaneous swelling and was hence diagnosed as suffering from giant urticaria. Considering the negative family or past history, recurrence of giant urticaria with introduction of risperidone and the response to antihistamines and steroids, the patient probably developed an allergic form of urticaria due to risperidone. Clinicians need to be aware of this potential complication and be able to recognize it.

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