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LETTER TO THE EDITOR

Risperidone Related Pretibial Edema: A Case Report

Risperidone, a commonly used atypical antipsychotic, is used in the treatment of bipolar disorder, schizophrenia, Tourette's syndrome, autism, delirium, and dementia and is also used as adjunctive treatment for other psychiatric disorders (1). However, it is associated with a range of side effects, some of which are rare but clinically significant. Pretibial edema is one such rare adverse effect. Here, we present a case from our clinical practice to highlight this uncommon side effect of risperidone and to emphasize the importance of recognizing and managing such cases.

Our case involved a 52-year-old woman who came into our clinic with moderate depressive symptoms. Escitalopram 10 mg/day was prescribed as an initial course of treatment, and the dose was gradually increased to 20 mg/day. The patient experienced partial relief of her symptoms, and risperidone 1 mg/day was added to her treatment at the third-month follow-up.

One month later, the patient reported that her symptoms had improved but noticed swelling in her legs starting from the second week of treatment. Physical examination revealed pretibial 2–3+ edema. Test results for the whole blood count, kidney function, liver function, electrolytes, serum total protein, electrocardiogram, thyroid function tests, and PA chest X-ray were all normal.

Detailed evaluations by cardiology, cardiovascular surgery, and internal medicine departments did not reveal any non-drug-related cause for this condition. The 1 mg/day risperidone therapy was discontinued since it was believed to be connected to the edema. One week after discontinuation, the patient's pretibial edema totally disappeared; however, some of her psychological symptoms returned. Upon recurrence of complaints, the patient started on risperidone 0.5 mg/day at her own request, but the drug had to be discontinued due to redevelopment of edema. At the follow-up examination, aripiprazole 2.5 mg/day was added to the treatment, and the patient remained in remission without developing edema.

Informed consent was obtained from the patient for the publication of this case report. The link between risperidone and pretibial edema was scored as 8 on the Naranjo scale, indicating a probable association (2). The temporality between drug administration and the onset of edema, as well as its resolution upon cessation of the medication, suggests that the edema was related to risperidone.

The mechanisms underlying risperidone-associated edema remain unknown; however, several explanations have been proposed to account for the correlation. Proposed explanations include peripheral vasodilation due to alpha-adrenergic blockade (3).

Another proposed mechanism is that risperidone's 5-HT2 receptor blockade may increase cAMP levels, leading to the relaxation of vascular smooth muscles by phosphorylating myosin light chain kinase (3,4). Lastly, dopaminergic receptor blockade affects renal regulation of fluids (5).

Additional mechanisms, such as allergic reactions to risperidone or its excipients, may also play a role. It is also possible that unforeseen mechanisms contribute to the development of edema.

Risperidone treatment can lead to rare but serious side effects, such as pretibial edema. Clinicians should be vigilant for this side effect during risperidone treatment and consider alternative treatment options if necessary.

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