Severe Weight Gain With Long-Acting Injectable Risperidone: A Case Report

To the Editor: Weight gain is a major problem with second-generation antipsychotics.[1] Risperidone is generally considered to be of moderate risk in inducing weight gain when compared to other second-generation antipsychotics. We report the case of a patient diagnosed with schizophrenia, catatonic type, who gained 84 lb (38.1 kg) during 14 months of therapy with long-acting injectable risperidone.

Case report. Mr A, a 23-year-old white man, was admitted to the inpatient psychiatric service with persecutory delusions and ideas of reference. He had become increasingly paranoid and refused to leave the house for several weeks. At the time of admission, his family reported that he believed the food was poisoned, refused to eat, and subsequently lost more than 30 lb (13.6 kg).

During the hospitalization, Mr A developed symptoms consistent with a catatonic episode including mutism, stupor, and catalepsy. As a result, he was transferred to the medical floor and treated for malnutrition and dehydration. His catatonia improved with electroconvulsive therapy, and he began taking food by mouth. He was then transferred back to the inpatient psychiatric service, where his psychotic symptoms improved with haloperidol.

The patient was discharged to our outpatient psychiatric clinic with a diagnosis of schizophrenia, catatonic type (*DSM-IV-TR* criteria). His family reported partial compliance with haloperidol, which led to the drug's discontinuation 3 weeks after intake at our clinic. Over the following 6 weeks, long-acting injectable risperidone was initiated and titrated to the eventual dose of 37.5 mg intramuscularly, given every 2 weeks. Mr A received concomitant paliperidone only for the first 4 weeks of treatment with risperidone.

At his first visit to our clinic, Mr A weighed 170 lb (77.1 kg). The family reported that his baseline weight was 200 lb (90.7 kg) prior to the development of the psychotic symptoms that led to his 30-lb weight loss. At the time of initiation of risperidone therapy, Mr A's weight was 199 lb.

Mr A continued taking long-acting injectable risperidone 37.5 mg every 2 weeks as well as citalopram 20 mg/day. Citalopram was modestly effective in treating his negative symptoms. Fourteen months from the initiation of long-acting injectable risperidone, his weight was 284 lb (128.8 kg), an 84-lb (38.1 kg) increase from his baseline.

In an open-label case series, Malempati et al[2] reported a mean weight gain of 1.6 kg (3.5 lb) over 1 year in 10 patients diagnosed with bipolar disorder who were treated with long-acting injectable risperidone (25–50 mg every 2 weeks). Data regarding adverse effects of long-acting injectable risperidone in populations of patients with schizophrenia principally come from short-term studies. A meta-analysis conducted by Allison et al[3] showed a mean weight gain of 2.10 kg (4.6 lb) for oral risperidone after 10 weeks of treatment. In addition, the Risperdal Consta package insert references a 12-week, double-blind, placebo-controlled trial in which 9% of patients gained more than 7% of their initial weight.[4]

Our patient gained 42% of his baseline weight (200 lb [90.7 kg]) over 14 months. The concomitant use of citalopram is most likely not a contributing factor to his severe weight gain. An additional factor to consider is the patient's diagnosis of schizophrenia, catatonic type. This rare subtype of schizophrenia was quite likely not explicitly evaluated in the seminal studies that led to the US Food and Drug Administration approval of long-acting injectable risperidone. Parenthetically, this is the first case report documenting severe weight gain with long-acting injectable risperidone. Hence, it is difficult to conclude that the diagnosis of schizophrenia, catatonic type, is not a risk factor for severe weight gain during long-term treatment with long-acting injectable risperidone.

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