

## Letter to the Editor (Comment)

### Ziprasidone-induced acute laryngeal dystonia

Dear Sir,

The case report by Rosenfield and colleagues underscores that acute dystonia is not uncommon with second generation antipsychotics (SGAs) (Rosenfield et al., 2007). Their case didn't exhibit laryngeal dystonia, a rare but potentially fatal type of antipsychotic-induced dystonia. I recently encountered a patient with schizophrenia who developed acute laryngeal dystonia with ziprasidone.

Mr. A, an-18-year-old male, diagnosed with paranoid schizophrenia of a year's duration per DSM-IV-TR, was admitted for first-break psychosis. He was neuroleptic-naïve and was started on ziprasidone 20 mg bid with food on day 1, which was increased to 40 mg bid on day 2, and then to 60 mg bid on day 3. On day 3, a few hours after the first dose of 60 mg ziprasidone, Mr. A experienced sudden difficulty in speaking along with choking sensation. His tongue felt thick and he appeared in distress. On examination, he displayed dysphonia, but there was no evidence of any other dystonic or extrapyramidal signs. Vitals signs were: blood pressure 149/97 mm Hg; pulse 114/min; respiratory rate 18/min; temperature 97.4°F; oxygen saturation 99% on room air. His lungs were clear. Laryngeal dystonia was considered and ziprasidone was discontinued. Mr. A showed complete resolution of the symptoms within 15 min of receiving benztropine 1 mg intramuscular, which reinforced the diagnosis of laryngeal dystonia. He had another episode of acute laryngeal dystonia about five hours later which again remitted with intramuscular benztropine 1 mg. He was started on oral benztropine 1 mg bid and risperidone was commenced and increased to 4 mg bid over several days without recurrence of laryngeal dystonia.

A PubMed search and a literature review didn't reveal any published cases of acute laryngeal dystonia with ziprasidone or other SGAs (Christodoulou and Kalaitzi, 2005), although the author has seen another case of acute pharyngolaryngeal dystonia with ziprasidone (Duggal, in press). In the aforementioned case, however, the patient had concurrent cocaine use, which in itself is associated with dystonia and also considered a risk factor for neuroleptic-induced dystonia (van Harten et al.,

1998). Laryngeal dystonia is a potentially fatal type of dystonia with some authors attributing unexplained sudden deaths in patients receiving antipsychotic drugs to hypothesized asphyxia secondary to antipsychotics (Christodoulou and Kalaitzi, 2005; Fines et al., 1999). The risk factors of acute laryngeal dystonia relevant to the index case included young age and male sex (Christodoulou and Kalaitzi, 2005). Laryngeal dystonia is often accompanied by sympathetic hyperactivity and respiratory distress, which may be misconstrued as a panic attack. Other differential diagnosis of acute antipsychotic-induced laryngeal dystonia include tardive laryngeal dystonia, anaphylaxis, airway obstruction, and respiratory dyskinesia (Christodoulou and Kalaitzi, 2005). A high index of suspicion is desirable to recognize antipsychotic-induced acute laryngeal dystonia and this case exemplifies that this rare adverse effect, which has so far been described only with conventional antipsychotics, can also occur with SGAs.

### References

- Christodoulou C, Kalaitzi C. Antipsychotic drug-induced acute laryngeal dystonia: two case reports and a mini review. *J Psychopharmacol* 2005;19:307–11.
- Duggal HS. Acute Pisa syndrome and pharyngolaryngeal dystonia possibly due to ziprasidone. *J Neuropsychiatry Clin Neurosci* in press.
- Fines RW, Brady Jr WJ, Martin ML. Acute laryngeal dystonia related to neuroleptic agents. *Am J Emerg Med* 1999;17:319–20.
- Rosenfield PJ, Girgis RR, Gil R. High-dose ziprasidone-induced acute dystonia. *Progr Neuro Psychopharmacol Biol Psychiatry* 2007;31:546–7.
- van Harten PN, van Trier JCAM, Horwitz EH, Matroos GE, Hoek HW. Cocaine as a risk factor for neuroleptic-induced acute dystonia. *J Clin Psychiatry* 1998;59:128–30.

Harpreet Singh Duggal  
Herrick Medical Center,  
500 E. Pottawatamie Street, Tecumseh,  
MI 49286, United States  
Tel.: +1 517 423 8396.  
E-mail address: [bobduggal@yahoo.com](mailto:bobduggal@yahoo.com).

14 January 2007