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CORRESPONDENCE

Tardive tachypnea

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Dear Editor,

We would like to share with your readers an interesting case of tardive dyskinesia-related tachypnea, a disease rarely reported in the literature.

A 51-year-old woman treated with quetiapine, desipramine and hydroxyzine for bipolar disorder presented with an overdose of desipramine requiring endotracheal intubation. During her ICU stay she received medications including lorazepam, levitiracetam and dexmetomidine. On the 5th day in hospital, during a pause in sedative administration, she breathed 30–40 breaths/min irrespective of pressure support of 0–20 cm H_2O. Next day, she breathed 35–50 breaths/min without tachycardia or hypertension. Most tidal volumes were <100 ml with occasional breaths >500 ml. Arterial blood gas analysis showed pH 7.41, PCO_2 34 mmHg, PO_2 131 mmHg on 50 % inspired oxygen. She was extubated, but continued to breathe comfortably at 40–50 breaths/min (see video). With endotracheal tube removed, involuntary tongue movements were observed and treated with benztropine. The patient was alert, able to speak in full sentences and cooperative. Over the next 48 h, her respirations normalized and tongue movements slowly improved.

There are very few reported cases [1–3] of tardive dyskinesia-related tachypnea. Extreme (and stable) tachypnea was reported in one patient after withdrawal of prochlorperazine that resulted in tardives and diaphragmatic flutter at a rate of 30–60/min [3]. Our case is unique and unexpectedly associated with successful extubation. While it is almost always inadvisable to extubate patients breathing more than 35 breaths/min, this case demonstrates that there are rare exceptions to sound physiologic rules.

Electronic supplementary material
The online version of this article (doi:10.1007/s00134-016-4555-5) contains supplementary material, which is available to authorized users.

Compliances with ethical standards

Conflicts of interest
The authors have no relevant conflicts of interest, all ethical standards have been observed and the patient described herein has granted written consent for publication of her case and video.

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