Shock-like sensations associated with duloxetine discontinuation

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Abrupt interruption of antidepressive medications has been associated with a discontinuation syndrome including somatic and psychological symptoms. Discontinuation-emergent adverse events (DEAEs) have been reported nearly with all classes of antidepressants but mainly with selective serotonin reuptake inhibitors (SSRIs) and the norepinephrine-serotonin reuptake inhibitor venlafaxine, and to a lesser extent with duloxetine (1-3). The most frequent symptoms are nausea, dizziness, fatigue, anxiety, headache, insomnia, and paresthesia. Shock-like sensations have also been described after abrupt withdrawal of SSRIs and venlafaxine but not with the more recently marketed agent duloxetine (2, 3). Here, we describe the case of a major depressed woman treated with duloxetine who experienced shock-like sensations after discontinuation of duloxetine.

Mrs A. is a 29-year-old woman who received 60 mg of duloxetine for a single major depressive episode. She did not have any other axis I or axis II diagnoses according to DSM-IV criteria. She achieved remission after 3 weeks of treatment. About 3 months later, she missed one dose of duloxetine, and 36 hours later she experienced nausea, dizziness, and strange sensations in the brain described as electric shocks appearing very frequently in a "stroboscopic manner." These brain sensations were considered as very disturbing. They lasted 8 hours and disappeared about 3 hours after the intake of duloxetine 60 mg. Treatment with duloxetine was maintained 3 months more and then gradually tapered to 15 mg before a complete interruption. About 2 days after duloxetine discontinuation, the patient experienced the same symptomatology as before with "electric shocks inside the head," nausea, and dizziness. This symptomatology persisted for 3 days and finally resolved after initiation of a treatment with fluoxetine, which was continued for more than 3 months. The maintenance of fluoxetine was requested by the patient who expressed a real fear of having these shock-like reactions again. The patient never experienced this kind of sensation before the treatment of her mood episode.

The discontinuation syndrome associated with the interruption of duloxetine treatment induced very important discomfort. The symptom profile appears quite similar to that reported with SSRIs and venlafaxine. In a recent study, a pooled analysis of 6 short-term trials assessing the impact of an abrupt interruption of duloxetine, DEAEs were reported by 44.3% of the patients in the duloxetine group compared to 22.9% in the placebo group (3). The mechanism underlying the discontinuation syndrome is not fully understood, but the pharmacokinetic half-life of the medication seems to be an important factor. Antidepressants with a short half-life tend to be associated with a significant rate of DEAEs and a higher severity level (1). As the half-life of duloxetine is short (12 hours), a gradual reduction of the dose should be recommended to the clinician in a very clear way.
References

