

DULOXETINE HYDROCHLORIDE INDUCED PARESTHESIA - A CASE REPORT

SAI PAWAN AR¹, BIRENDRA SRIVASTAVA², RAMESH ADEPU¹¹Department of Pharmacy Practice, Vikas College of Pharmaceutical Sciences, Suryapet, Telangana, India. ²Department of Pharmacy, School of Pharmaceutical Sciences, Jaipur National University, Jaipur, Rajasthan, India.

*Corresponding author: Sai Pawan AR; Email: saipawan.a145@gmail.com

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ABSTRACT

A 45-year-old HIV-positive female patient experienced a generalized burning sensation after the administration of one dose of duloxetine 20 mg. The patient's concurrent medications include a fixed drug combination of nevirapine 200 mg, Lamivudine 150 mg, and Zidovudine 300 mg, twice daily for 5 years. The patient recovered from the generalized burning sensation the next day after the withdrawal of duloxetine. From the causal relationship assessment, we observed that neither the disease, comorbid conditions, nor concurrent medications were found responsible for the burning sensation experience in this patient. Available data from post-marketing surveillance of duloxetine suggest that to date the incidence of duloxetine-induced burning sensation of skin was reported to be 1 in 870 patients. Health-care providers should watch for this rare but important adverse effect of duloxetine.

Keywords: Duloxetine HCl, Paresthesia, Immune-compromised patient, Depression.

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INTRODUCTION

Duloxetine, serotonin and norepinephrine reuptake inhibitor are recommended to treat generalized anxiety disorder, major depressive disorder, fibromyalgia, and diabetic peripheral neuropathic pain. So far, the common adverse effects reported with duloxetine are nausea, dizziness, fatigue, and headache [1].

CASE REPORT

This case report belongs to a 45-year-old HIV-positive female patient, who was receiving highly active antiretroviral therapy (HAART) medications for the last 5 years. The patient consulted the ART center of the tertiary care government medical college hospital with complaints of epigastric pain, restlessness for 15 days and a burning sensation since the last night. The patient informed the duty medical officer that she was prescribed duloxetine 20 mg once daily by a psychiatrist for her depression on the previous day. The patient took only one dose of duloxetine 20 mg the last evening and started experiencing a generalized burning sensation all over the body. Duloxetine was withdrawn on the day of admission and she was kept under observation. The patient recovered from the generalized burning sensation the next day after the withdrawal of duloxetine. The patient's concurrent medications were HAART which included the fixed drug combination of Nevirapine 200 mg Zidovudine 300 mg, and Lamivudine 150 mg twice daily and she was continued with her regular HAART.

DISCUSSION

Depression is one of the most common mental health disorders observed among many patients with HIV [2]. Due to the social stigma, depressive disorder is seen 3 times more among immunocompromised individuals and the prevalence of depression is estimated between 22 and 45% compared to HIV-negative individuals (3-17%) [3]. Depression in HIV patients may result in poor adherence to ART and HIV care, poor therapeutic outcomes, and decreased quality of life [4]. Treatment of depression in HIV patients is likely to produce multiple positive outcomes such as improved medication adherence, decreased risk behavior, suicidal tendency, and enhanced quality of life.

Antidepressant drug selection requires diligent considerations such as high efficacy and fewer adverse effects that may interfere with

treatment adherence and outcomes. As patients with HIV are often burdened with complex treatment regimens and need to maintain antiretroviral adherence for successful therapy [5].

A search was made in the English language using the terms "duloxetine" and "burning sensation" or "duloxetine induced burning sensation" in OvidSP and PubMed and did not find any case reports of duloxetine-induced generalized burning sensation. However, the search identified a report of post-marketing surveillance of a duloxetine formulation marketed by Cymbalta USA. About 39,138 patients receiving duloxetine were reported to have experienced various side effects when taking duloxetine. Among them, 45 (0.11%) patients complained of having skin-burning sensations. The report suggests that the majority patient population suffering from burning sensation were female gender (85%) and 2% of them belonged to the age group of 30-39 years. This case report was observed in a female patient aged about 45 years, coinciding with the above findings [6].

In another case report published in the Journal of Clinical Psychopharmacology, a female patient aged 50 years presented with anxiety and depression and received duloxetine 30 mg. She experienced a burning sensation in her sole several times a day for 1-2 h each time. She was not on any other medication and had no pathological evidence. Post-discontinuation of medication, the burning sensation subsided [7]. In another case report, in the Journal of Clinical Psychopharmacology, a 48-year pre-menopausal female presented with depression was prescribed duloxetine 60 mg/day as she had no response to previous treatment with SSRIs and SNRIs. She developed generalized mild pruritic rashes and edema in the preorbital area, after discontinuation of treatment edema and rashes subsided [8]. The causality assessment suggests the reaction is possible [9,10].

In this patient, neither the disease condition nor the other concurrent medication has any evidence of causing the burning sensation in the body. The mechanism of this reaction to duloxetine is unknown.

CONCLUSION

The published reports corroborate the duloxetine-induced burning sensation in the skin. Health care providers should watch for this rare but important adverse effect of duloxetine.

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AUTHOR CONTRIBUTION

A rare ADR has been detected and this information adds value to the literature and acts as a caution to the prescribers.

CONFLICTS OF INTEREST

None.

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