

Letters to the Editor

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IMPROVEMENT OF ANTIDEPRESSANT-INDUCED SWEATING WITH AS-REQUIRED BENZTROPINE

Dear Editor:

Antidepressant-induced excessive sweating (ADIES) is a common antidepressant-related side effect, and its prevalence is estimated to range from 4 to 22 percent.¹ Adverse effects are a common reason for nonadherence and discontinuation of antidepressant medication, and alleviating these side effects may improve adherence and promote positive outcomes. We report a case of ADIES that improved with as-required use of benztropine, an anticholinergic agent.

Case report. A 37-year-old male patient presented with low mood, poor energy levels, poor concentration, reduced libido, and weight gain of insidious onset and gradual worsening for three months. He was started on venlafaxine 75mg that was increased gradually to 225mg over seven weeks. His depressive symptoms improved on 225mg of venlafaxine; however, he experienced excessive sweating around his face and chest regions. Despite the side effects, patient was hesitant to switch to a different antidepressant as his depressive symptoms had responded to venlafaxine. He was initially reluctant to take another medication for venlafaxine-induced sweating; however, he returned a few weeks later to discuss the social impact of the excessive sweating. He said he felt embarrassed in public and was interested in treatment for the side effect. The addition of a beta-blocker was considered; however since his

resting pulse rate was 61 BPM, this option was not pursued for the fear of making him bradycardic. He was started on benztropine 0.5mg to be taken as needed. The patient reported using benztropine only on warm and hot days and experienced significant relief from ADIES within an hour of ingestion of the drug. He denied any adverse effects with benztropine and has been using this combination for more than nine months.

Discussion. Adrenergic actions of antidepressants are implicated in causing ADIES, with adrenergic antidepressants like venlafaxine and bupropion having a higher propensity. Both alpha and beta blockers can help improve ADIES by blocking adrenergic output. Alpha blockers can cause dizziness and lightheadedness, and beta-blockers can cause bradycardia.² Serotonergic antagonists like cyproheptadine reduce sweating by 5-HT_{2a} blockade in the hypothalamic region. However, all of these medications require regular administration. Sweat glands are unique in that their sympathetic postganglionic innervation, being cholinergic, can be blocked with anticholinergics like benztropine.³

Our literature search revealed a case of venlafaxine-induced night sweats⁴ and another with venlafaxine-induced ADIES⁵ treated with benztropine. Sweating is a physiological process influenced by environmental factors like temperature and humidity. For some patients, ADIES is problematic only on particular days. Benztropine exerts its action within 1 to 3 hours and can last up to 12 hours;⁶ our patient experienced benefit within an hour of ingestion and was using benztropine only on hot and humid

days. This is the first case reporting as-required use of benztropine in ADIES. Additional reports and controlled studies are recommended to confirm the utility of benztropine in ADIES. Anticholinergics are generally well-tolerated medications but caution should be exercised in patients with prostrate hypertrophy, urinary retention, and narrow-angle glaucoma.⁶

References

1. Marcy TR, Britton ML. Antidepressant-induced sweating. *Ann Pharmacother.* 2005Apr;39(4):748–52. Epub 2005 Feb 22.
2. Mago R, Thase ME, Rovner BW. Antidepressant-induced excessive sweating: Clinical features and treatment with terazosin. *Ann Clin Psychiatry.* 2013Aug;25(3):186–92. Epub 2013 May 1.
3. Cheshire WP, Fealey RD. Drug-induced hyperhidrosis and hypohidrosis: incidence, prevention and management. *Drug Saf.* 2008;31(2):109–26.
4. Pierre JM, Guze BH. Benztropine for venlafaxine-induced night sweats. *J Clin Psychopharmacol.* 2000 Apr;20(2):269.
5. Garber A, Gregory RJ. Benztropine in the treatment of venlafaxine-induced sweating. *J Clin Psychiatry* 1997;58:176–7.
6. Sadock BJ, Sadock VA. *Kaplan and Sadock's Synopsis of Psychiatry: Behavioural Sciences/Clinical Psychiatry.* Chapter: 36.5 Anticholinergics and Amantadine. p1004–8. 10th ed. Lippincott Williams And Wilkins. Philadelphia 2007.

With regards,

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