Options for treating antidepressant-induced sweating

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Excessive sweating—diaphoresis—affects up to 22% of patients who take antidepressants.[1] Diaphoresis may interfere with social and occupational activities, which can lead to medication discontinuation and prevent effective treatment. Stopping, decreasing, or changing antidepressants are options, but patients may be reluctant if the current dose has relieved their depressive symptoms. Adding a medication to reduce diaphoresis may be appropriate.

Sympathetic division of the peripheral nervous system signals cholinergic neurons to stimulate sweat gland secretion. In the CNS, thermoregulation occurs in the hypothalamus through a balanced and complex interaction among serotonergic and dopaminergic neurons.[1] Consequently, oral medications to decrease sweating target peripheral or CNS neurons. Although evidence is limited to case reports, consider cholinergic and serotonergic antagonists and dopamine partial agonists to relieve antidepressant-induced diaphoresis.

Pharmacologic options

Peripherally, the anticholinergic agent benztropine reduced or eliminated diaphoresis at doses ranging from 0.5 mg every other day to 1 mg/d.[2,3] Dry mouth was the only reported side effect.

Centrally acting serotonin antagonists may decrease diaphoresis through the 5-HT2A receptor, which signals the hypothalamus to raise body temperature. Cyproheptadine is an antihistamine with serotonin receptor antagonism. In case reports, it reduced or eliminated sweating in doses of 4 mg once or twice daily.[4] Mild sedation was the only noted adverse effect. The norepinephrine and serotonin antagonist mirtazapine reduced diaphoresis within 2 weeks of initiation at 15 mg/d with no adverse effects.[5] Sweating resolved after mirtazapine was titrated to 60 mg/d.

In addition to excess serotonin activity, diaphoresis may result from decreased dopaminergic tone in the hypothalamus. Centrally acting dopamine agonists—even partial agonists—may restore homeostasis and decrease sweating. Aripiprazole, 10 to 20 mg/d, reduced sweating in 2 patients; no adverse effects were reported.[6]

Agents to avoid

Antiadrenergic medications such as clonidine have decreased or exacerbated diaphoresis in studies.[1] Similarly, paroxetine may alleviate or cause sweating. It is difficult to attribute paroxetine's occasional effectiveness in reducing sweating solely to its anticholinergic properties because improvement may be attributed to an initial anxiolytic effect or efficacy in treating the underlying anxiety disorder.[1]

References

1. Marcy TR, Britton ML. Antidepressant-induced sweating. Ann Pharmacother. 2005;39(4):748-752.
2. Pierre JM, Guze BH. Benztropine for venlafaxine-induced night sweats. J Clin Psychopharmacol. 2000;20(2):269.
3. Garber A, Gregory RJ. Benztropine in the treatment of venlafaxine-induced sweating. J Clin Psychiatry. 1997; 58(4):176-177.
4. Ashton AK, Weinstein WL. Cyproheptadine for drug-induced sweating. Am J Psychiatry. 2002;159(5): 874-875.
5. Buecking A, Vandeleur CL, Khazaal Y, et al. Mirtazapine in drug-induced excessive sweating. Eur J Clin Pharmacol. 2005;61(7):543-544.
6. Lu BY, Cullen CE, Eide CE, et al. Antidepressant-induced sweating alleviated by aripiprazole. J Clin Psychopharmacol. 2008;28(6):710-711.

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