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## Antidepressant-Induced Yawning

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**Y**awning is a very unusual and uncommon side effect of antidepressant medications.<sup>1</sup> There are reports<sup>1</sup> of excessive yawning caused by several antidepressant medications, including duloxetine, clomipramine, fluoxetine, citalopram, sertraline, and paroxetine.

Research has also suggested an increased rate of yawning in patients taking antidepressants compared to placebos.<sup>2</sup> In most case reports, there was no direct relationship between yawning and daytime sleepiness.<sup>2</sup> We report a case of a patient who developed yawning with every antidepressant she was prescribed, resulting in discontinuation of the medication.

### Case Report

Ms A is a 41-year-old married white woman who had a history of social anxiety disorder. She worked as a teacher and had extreme difficulty with her job because of social anxiety symptoms. Her anxiety symptoms included increased heart rate and feelings of panic whenever she had to present in front of her class. Anxiety would even be severe when she had to present at regular staff meetings. She was on oral alprazolam 0.5 mg/d as needed for anxiety at the time of her first visit to our clinic and stated that she could not tolerate any antidepressants.

Before Ms A was seen in our clinic, she was prescribed several antidepressants but developed yawning spells. The list of antidepressants she tried is as follows: fluoxetine, sertraline, escitalopram, venlafaxine, desvenlafaxine, and bupropion. She stated that she developed yawning within the first 2 weeks of a trial with fluoxetine 10 mg. She described that she would have an irresistible urge to yawn. She did not feel tired or sleepy and had to yawn every few seconds. She felt irritated and could not stop yawning. Yawning stopped after 2 weeks within discontinuing fluoxetine. She had a similar pattern of yawning with each antidepressant she tried.

Ms A reported that antidepressants helped her anxiety symptoms, but she could not function as a teacher because of the constant and irresistible yawning. She did not remember each antidepressant's dose but stated that she would develop yawning at the smallest dose of each medication within the first 2 weeks. The yawning would stop immediately within a couple of days of discontinuing the antidepressant, but with fluoxetine it took 2 weeks for the yawning to stop after discontinuation. Ms A felt that the frequency and intensity of yawning correlated with increased doses of the antidepressant medications.

Ms A reported that yawning was not associated with daytime sleepiness or fatigue. She also denied having an insufficient sleep, as she would get up to 7 to 8 hours of sleep each night.

Ms A denied any depressive symptoms of sad mood or anhedonia. She denied any lack of energy. However, excessive yawning did affect her breathing. Frequent yawning caused "shortness of breath." The patient reported feelings of light suffocation and needed deep air gasps. These yawning spells were frequent throughout the day. She reported no physical distress but admitted to having psychological stress, as the yawning affected work productivity.

She did not want to try another antidepressant and wished to continue a small dose of a benzodiazepine, as she felt it helped her. She was switched to clonazepam 0.5 mg twice/day, as alprazolam is short acting and did not control her anxiety throughout the day.

On clonazepam 0.5 mg, she reported significant improvement in her social anxiety symptoms and was able to teach her classes. Also, she was able to present at school meetings, which was very difficult without the medication. She reported no side effects on clonazepam, including yawning.

### Discussion

This case illustrates that antidepressants can cause side effects that are not common but can cause distress in patients' lives. Yawning should be recognized as an adverse effect of certain selective serotonin reuptake inhibitors and other antidepressant medications. In our patient's case, she tried several antidepressant medications but could not continue because of yawning. Also, she described some subtle shortness of breath.

The relationship between antidepressants and yawning has been described previously.<sup>3</sup> Yawning is a natural reaction that occurs during transit from wakefulness to sleep.<sup>3</sup> Studies<sup>2</sup> have shown that yawning can occur when the body is experiencing a state of increased fatigue and a change of

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alertness. Yawning has been thought to be associated with depression because of the common symptom of increased sleepiness and fatigue. Patients who have depression typically have sleep problems and tiredness leading to increased yawning. Yawning is common during episodes of fatigue and increases when the environmental stimuli can no longer provide arousal. Antidepressants taken by patients with depression can also be a source of excessive yawning.<sup>2</sup> Antidepressants have been shown to increase yawning in several studies.<sup>2</sup>

Although yawning is considered benign, it interfered with our patient's daily activities and work life. Her intense symptoms immediately stopped after discontinuing each antidepressant medication.

Yawning is a complex neurophysiologic process with unclear physiologic functions. The relationship between antidepressants and yawning is unclear but may be related to the effects of many different neurotransmitters.<sup>4</sup>

In our patient, discontinuation of antidepressants led to the cessation of yawning within a few days. In the case of fluoxetine, yawning stopped after 2 weeks of discontinuation.

It is interesting that Ms A tried several antidepressants and developed yawning with all of them that affected her functioning. We acknowledge that we had to rely on the patient's description and clinical history, as she was not prescribed antidepressants while in treatment at our clinic. Further studies are needed to investigate and confirm the mechanism of how these medications cause yawning.

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## REFERENCES

1. De Las Cuevas C, Sanz EJ. Duloxetine-induced excessive disturbing and disabling yawning. *J Clin Psychopharmacol*. 2007;27(1):106–107.
2. Hensch T, Blume A, Böttger D, et al. Yawning in depression: worth looking into. *Pharmacopsychiatry*. 2015;48(3):118–120.
3. Argiolas A, Melis MR. The neuropharmacology of yawning. *Eur J Pharmacol*. 1998;343(1):1–16.
4. Krestel H, Bassetti CL, Walusinski O. Yawning—its anatomy, chemistry, role, and pathological considerations. *Prog Neurobiol*. 2018;161:61–78.

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