

BACKGROUND

Dysgeusia is a distortion of taste sensation. Etiologies can include medications and COVID-19, among others. Dysgeusia may lead to appetite loss which is nonspecific and can have multiple causes, including major depressive disorder (MDD) (Coulter, 1988).

Some medications have been reported to cause dysgeusia as a potential adverse effect. Nifedipine is a calcium-channel blocker. Some of its reported side-effects include flushing, dizziness, edema, GI upset and distress, and transient hypotension (Levenson, 1985). Although post-marketing data revealed no association between nifedipine and dysgeusia (Ackerman, 1997), case reports of dysgeusia from nifedipine exist (Ackerman, 1997). We present a case of nifedipine-induced dysgeusia mistaken for depression.

CASE REPORT

A 42-year-old man with hypertension and diabetes was admitted to the hospital following right thalamocapsular and intraventricular hemorrhages. Hypertension was managed with metoprolol, lisinopril, nifedipine, and chlorthalidone. Levetiracetam was started for seizure prophylaxis. Medications included pantoprazole, simethicone, transdermal lidocaine, insulin, metformin, docusate, senna, and subcutaneous heparin.

Psychiatric consultation was requested out of concern that appetite loss indicated depression. The day before psychiatric evaluation, mirtazapine 15 mg at bedtime for mood and appetite was started. Nifedipine 90 mg daily had been started 9 days prior to his first complaint of decreased appetite. The patient reported feeling disconnected from his family and "sad" for ~10 years, complaining that family members "talk behind his back." He was otherwise without paranoia. No other delusions were elicited. He denied insomnia, anhedonia, hopelessness, poor concentration, suicidal ideation, homicidal ideation, guilt, mania, auditory or visual hallucinations.

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Medication	Incidence %
Acetazolamide	12–100
Maribavir	83
Cisplatin	77
Eszopiclone	16–32
Topiramate	8
Captopril	2–7
Lithium	5

Table: Incidence of taste disturbance in common medications (4)

Dysgeusia is widely recognized as a symptom of Covid-19. Other causes, including medications may be underrecognized and amenable to intervention.

CASE REPORT- CONTINUED

He reported poor appetite due to epigastric discomfort and bad taste to foods. His epigastric discomfort was monitored with an EKG, and was being treated with a lactose-free diet, pantoprazole and simethicone. He also complained of constipation which was treated with docusate sodium. Covid-19 testing was not yet widely available. No other signs or symptoms suggestive of Covid-19 were present. Although alert and fully oriented, concentration was impaired with tangential thought processes at times. Affect was full without depression. A diagnosis of adjustment disorder was made, as patient did not meet diagnostic criteria for Major Depressive Disorder. The psychiatry team suspected nifedipine-induced dysgeusia and advised discontinuing nifedipine. The primary medical team ceased nifedipine administration. The patient reported improvement in his appetite two days later.

DISCUSSION

This case highlights the importance of considering alternative causes of nonspecific symptoms of depression, including decreased appetite, that may have non-psychiatric causes. Dysgeusia is widely recognized as a symptom of Covid-19. Other causes, including medications may be underrecognized and amenable to intervention.

CONCLUSION

It would be helpful to consider medication side-effects as potential causes for taste distortion alongside psychiatric diagnoses, and COVID-19.

References

- (1) Coulter DM: Eye pain with nifedipine and disturbance of taste with captopril: a mutually controlled study showing a method of post marketing surveillance *BMJ* 1988; 296: 1086–8.
- (2) Ackerman BH, Kasbekar N: Disturbances of taste and smell induced by drugs. *Pharmacother-apy* 1997;17(3):482-96.
- (3) Levenson J, Kennedy K: Dysomia, Dysgeusia, and Nifedipine. *Annals of Internal Medicine* 1995; 102(1): 135-136.
- (4) Douglass R, Heckman G. Drug-related taste disturbance: a contributing factor in geriatric syndromes. *Can Fam Physician*. 2010;56(11):1142-1147.