

Pearls

Maju Mathews, MD, Manu Mathews, MD, and Joanne Mathews, MD, on

How to remedy excessive salivation in patients taking clozapine

Hypersalivation caused by clozapine can lead to sleep deprivation, salivary gland swelling,¹ and aspiration pneumonia.² Its socially stigmatizing effects can also deter patients with psychotic illnesses from taking clozapine.

It is not clear at what dosage clozapine causes sialorrhea, but the higher the dosage the more severe the problem. Hypersalivation usually resolves with continued clozapine therapy. Until that happens, the following agents may help.

Drug management

- **Benztropine**, an acetylcholine antagonist used in Parkinson's disease, can be started at 1 mg at night, when hypersalivation is most troublesome. If needed, increase to 2 mg qhs or 1 mg bid.

Benzotropine can cause dose-dependent anticholinergic effects ranging from peripheral (dry mouth, blurring of vision, tachycardia, urinary retention, constipation) to central (memory disturbance, restlessness, disorientation, delirium).

- **Scopolamine**, a transdermal used to prevent motion sickness, significantly reduced disabling hypersalivation in patients who wore a 1-mg patch behind the ear for 72 hours.³ The agent may irritate skin, so reserve it for severe cases.

- **Terazosin**, an alpha 1 receptor antagonist for hypertension, is effective at 2 mg qhs. Because the agent can cause hypotension, start at 1 mg/d for 1 week, then increase the dosage and monitor blood pressure at each visit.

Atropine, ipratropium bromide, and clonidine also have shown benefit in small studies.⁴⁻⁶

Other strategies

Lowering the clozapine dosage while maintaining its antipsychotic effect may also help reduce salivation. You might also advise the patient to:

- suck or chew sugarless candy or gum to increase swallowing
- place a towel on the pillowcase to prevent soaking the pillow overnight.

References

1. Brodtkin ES, Pelton GH, Price LH. Treatment of clozapine-induced parotid gland swelling. *Am J Psychiatry* 1996;153:445.
2. Hinkes R, Quesada TV, Currier MB, et al. Aspiration pneumonia possibly secondary to clozapine induced sialorrhea. *J Clin Psychopharmacol* 1996;16:462-3.
3. McKane JP, Hall C, Akram G. Hyoscine patches in clozapine induced hypersalivation. *Psychiatr Bull* 2001;25:277.
4. Antonello C, Tessier P. Clozapine and sialorrhea: a new intervention for this bothersome and potentially dangerous side effect. *J Psychiatry Neurosci* 1999;24:250.
5. Calderon J, Robin E, Sobota WL. Potential use of ipratropium bromide for the treatment of clozapine induced hypersalivation: a preliminary report. *Int Clin Psychopharmacol* 2000;15:49-52.
6. Grabowski J. Clonidine treatment of clozapine induced hypersalivation. *J Clin Psychopharmacol* 1992;12:69-70.

Dr. Maju Mathews is a resident, department of psychiatry, Drexel University College of Medicine, Philadelphia, PA.

Dr. Manu Mathews is a staff psychiatrist, East Surrey Hospital, Redhill, UK.

Dr. Joanne Mathews is a staff psychiatrist, West Suffolk Hospital, Bury's St. Edmonds, UK.

DRUG BRAND NAMES

Benzotropine • Cogentin
Clonidine • Catapres
Clozapine • Clozaril

Ipratropium • Atrovent
Scopolamine • Transderm-Scop