How to remedy excessive salivation in patients taking clozapine

Hypersalivation caused by clozapine can lead to sleep deprivation, salivary gland swelling, and aspiration pneumonia. 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.

  Benztropine 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. The agent may irritate skin, so reserve it for severe cases.

- **Terazocin**, 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.

**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**


**Drug BRAND NAMES**

- Benztropine  •  Cogentin
- Clonidine  •  Catapres
- Clozapine  •  Clozaril
- Ipratropium  •  Atrovent
- Scopolamine  •  Transderm-Scop

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**Pearls**

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

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**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.