

WELCOME

Clozapine & LAI Virtual Forum

May 3, 2023 | 4:00 – 4:45 pm ET

The Clozapine & LAI Virtual Forum is a peer-to-peer, interactive dialogue between psychiatrists, nurse practitioners, and other prescribing clinicians. It is informal, no registration required — just join our Zoom call and share your challenges and questions on the month's trending topic around either clozapine or LAIs.

TODAY'S TOPIC:

Management of Clozapine-Induced Sialorrhea: Highlighting Botulinum Toxin

MODERATORS

Robert Cotes, MD

SMI Adviser Physician Expert; Emory University

Dr. Robert Cotes, MD, is an Associate Professor at Emory University School of Medicine in the Department of Psychiatry and Behavioral Sciences. He directs the Clinical & Research Program for Psychosis at Grady Health System. His research interests are in clozapine and early psychosis.

Donna Rolin, PhD, APRN

SMI Adviser Nursing Expert; University of Texas, Austin

Dr. Donna Rolin is Clinical Associate Professor and the Director of the Psychiatric Mental Health Nurse Practitioner program at the University of Texas with 23 years of experience in psychiatric nursing, including inpatient, community, forensic, and older adult settings.

Jonathan Meyer, MD

Voluntary Clinical Professor, Department of Psychiatry, University of California, San Diego School of Medicine

Dr. Meyer has broad interests in the psychopharmacology of severe mental illness, and has published extensively on clozapine, antipsychotic kinetics, use of plasma antipsychotic levels to manage treatment, metabolic issues with medication therapy, and use of lithium.

Discussion Questions:

- How significant of a problem is clozapine-induced sialorrhea for the patients you treat?
 - Is sialorrhea ever a reason why some patient are hesitant to start clozapine?
 - Is sialorrhea a reason some patients have discontinued clozapine?
- What treatment strategies do you typically use for clozapine-induced sialorrhea?
 - What has worked?
 - What has not worked?
- Why shouldn't I use benztropine for sialorrhea management?

Sialorrhea

Incidence: 30-80%, not strongly dose dependent. Some tolerance may develop over time, but not typically.

Concerns:

- Social impairment
- **Risk for aspiration pneumonia:** In a review of 248 medical hospitalizations for clozapine treated patients, the 2 most common admission types were for:
 - Pulmonary 32.2% or gastrointestinal 19.8% illnesses
 - The most common pulmonary diagnosis was pneumonia, accounting for 58% of pulmonary admissions.

Mechanism: likely from norclozapine's M₁ agonism

Ineffective Treatments:

- Lowering the dose
- Putting a towel on the pillow at night

Sialorrhea Treatment – Step 1

Locally applied medications are used to avoid the increased risk for ileus posed by exposure to systemic anticholinergics. The two options:

- Atropine 1% ophthalmic drops: 1-3 gtts sublingually, initially at bedtime, and if needed up to TID. Recommend that patients swish and spit with **no more than** 5 ml water to spread the medication around the oral mucosa.
- Ipratropium bromide **0.06%** nasal spray used intraorally: 1-3 puffs orally swish and spit with 5 ml water, and if needed up to TID.

Comments:

1. If the patient fails one oral agent, try the other. The biggest initial focus for treatment is controlling nighttime sialorrhea and thereby lessening risk for aspiration during sleep.
2. **Do not use CNS penetrating anticholinergics (e.g. benztropine) to manage the problem of sialorrhea.**

Sialorrhea Treatment – Steps 2 and 3

Step 2: Salivary Gland Botulinum Toxin A or B injections

- Extensive evidence (6 double-blind studies), including case reports with clozapine using Botox-A and Botox-B. Both Xeomin® (incobotulinumtoxinA) and Myobloc® (rimabotulinumtoxinB) **are FDA approved for treatment of sialorrhea**. The California Dept. of State Hospitals established a Botox clinic in 2019.
- No systemic adverse effects. Very well tolerated. Effects last weeks – months. Initial response may require more than one round of injections due to the ongoing stimulus from norclozapine.
- Might not completely resolve the problem, but may allow one to avoid systemic agents.

Step 3: Glycopyrrolate

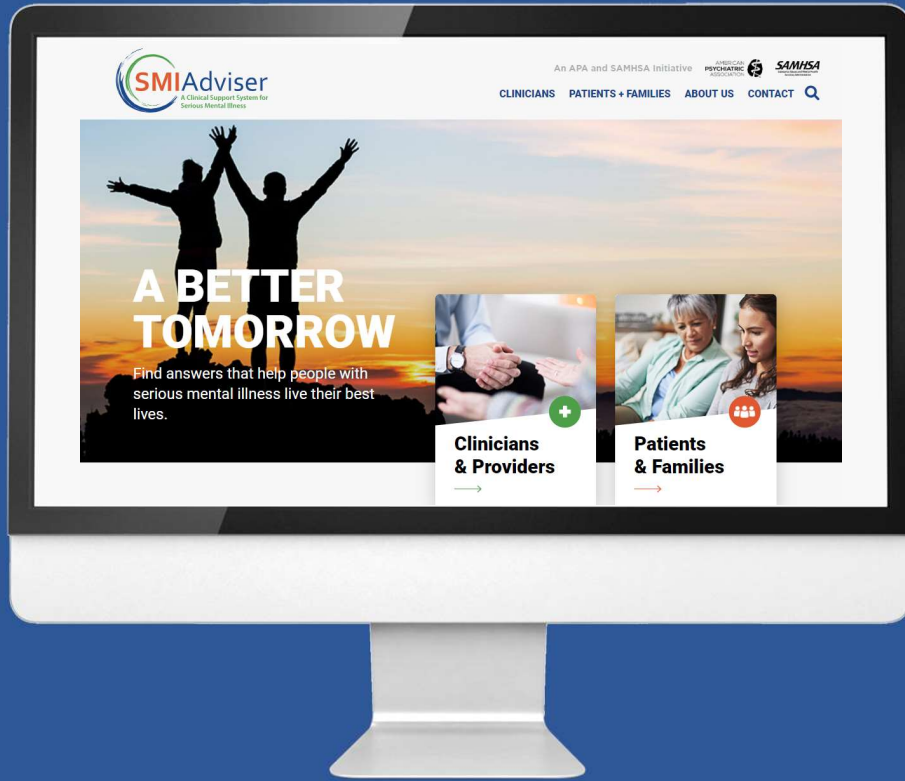
- **Evidence:** Several randomized trials. Glycopyrrolate does not penetrate the blood-brain barrier, avoiding CNS anticholinergic effects such as impaired memory.
- **However, it adds to clozapine's anticholinergic burden and doubles the risk for ileus.**

Other treatment approaches, based on case reports or case series:

- Alpha-2 agonists (e.g. 0.1 to 0.5 mg/day of clonidine) – dubious efficacy.

FEEDBACK

Please help us improve the Clozapine & LAI Virtual Forum by completing this survey:
<http://smiadviser.org/forumfeedback>



Pre-submit Cases

www.smiadviser.org/vfcases

UPCOMING VIRTUAL FORUM

LAI Topic

June 7, 2023 @ 4-4:45pm ET

For additional questions and resources – join the Clozapine and LAI Centers of Excellence Exchange Community

- www.smiadviser.org/cloz_lai_signup

An APA and SAMHSA Initiative

