**CONCLUSION:** Greater improvement in HRQoL and health status using EQ-5D-5L and EQ-VAS was observed among patients with TRD treated with ESK+AD vs AD+PBO. Funding Acknowledgements: This study was sponsored by Janssen Research and Development, LLC.

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## Laryngeal Dystonia and Buccolingual Crisis: Dystonic Reactions in 2 Patients Receiving Prochlorperazine During Suboxone Therapy

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**ABSTRACT:** We report two cases of acute dystonia in patients after receiving prochlorperazine to address nausea in the context of buprenorphine/naloxone (Suboxone) therapy. Both were admitted for opioid withdrawal and developed nausea and vomiting refractory to ondansetron on the first hospital day.

Within six hours of receiving an intramuscular injection of ten milligrams of prochlorperazine, a 24-year-old Caucasian male developed buccolingual crisis (trismus and dysphagia). His symptoms resolved with repeated intramuscular doses of diphenhydramine, benztropine, and lorazepam.

A 31-year-old Caucasian female developed laryngeal dystonia (stridor) and buccolingual crisis (dysphagia, grimacing, and tongue protrusion) within thirty minutes of receiving ten milligrams of prochlorperazine intramuscularly. Given respiratory impairment, emergency airway protection was initiated, and the patient responded to repeated intramuscular doses of benztropine and lorazepam.

Although one patient was male and both were relatively young, they did not have other known risk factors for drug induced acute dystonic reactions including history of dystonic reactions, recent cocaine use, or low BMI. Neither patient had a history of exposure to antipsychotic medications and both had medical histories that were otherwise noncontributory. While both patients were at risk for or developing dehydration from nausea and vomiting, their electrolytes were within normal limits on admission, less than twelve hours earlier. We postulate potential etiologies that may possibly explain these events:

 The patients' reactions are consistent with the expected number in the general population to have acute dystonia secondary to prochlorperazine use. A small study in 2000 showed that 3.9% of patients receiving prochlorperazine for nausea in an emergency room setting experienced acute dystonia.

- 2) Could patients receiving intramuscular prochlorperazine during Suboxone therapy have increased risk for severe acute dystonic reactions? According to the European Medicines Agency, hypertonicity is a "common" side effect of Suboxone, occurring in 1% to 10% of patients.
- 3) Could there be potential interactions between Suboxone and prochlorperazine or between prochlorperazine and substances detected (or undetectable, such as designer drugs) via routine toxicology screening?
- 4) Could the acute dystonia be unrelated to medication interaction, but instead result from use of prochlorperazine in patients having rapid electrolyte shifts and exhibiting dehydration during acute opioid withdrawal?

Given the known risk of opioids, with or without prochlorperazine, to cause respiratory depression and these case reports of acute dystonia with the potential to cause airway impairment due to prochlorperazine administration, we encourage prescribers to exercise caution when utilizing prochlorperazine for the management of nausea and vomiting in patients receiving Suboxone for acute opioid withdrawal.

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# Oviposit Dysgeusia; Head Trauma Induced Chemosensory Noisome Egg Dysgeusia: The Miasma of Dante's Inferno-When Eggs Become Rotten

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**INTRODUCTION:** Post-traumatic dysgeusia with conversion of the taste of eggs rotten eggs has not heretofore been described.

**METHOD:** Case Report: A 60 year old right handed female 6 months prior to presentation sustained head trauma. Three days later she noted reduced taste and smell dysgeusia to eggs. Eggs tasted distorted, like rotten eggs. Raw egg whites had no smell or taste. Cooked egg whites had faint sulfur smell for 2-3 seconds and the taste of sulfur. Yolk of soft-boiled eggs, had no smell or taste. The white had no smell but an unbearable sulfur taste. Raw eggs had no smell. The yolk of hardboiled eggs had no smell and taste, the whites smelled and tasted like sulfur. Sunny side up eggs with yolk and white segregated had no smell but tasted, as they should. Sunny side up eggs with yolk and white mixed together has no smell but strong

sulfur taste. Scrambled eggs had no smell but mild sulfur taste, which changed over time to a rotten egg smell and taste. With nose clips, scrambled eggs had 0/10 taste, without the nose clips the smell of sulfur was 3/10.

**RESULTS:** Olfaction: Normosmia to threshold and Retronasal Smell Index: 2 (abnormal): Gustatation: Normogeusia to all. Mild hypogeusia to sodium chloride. MRI: Multiple foci of periventricular and deep white matter demyelization.

**DISCUSSION:** Rotten egg smell maybe mediated through retro-nasal pathways, since nasal obstruction eliminated the rotten egg taste. Eggs can possibly be developed as a home device to assess chemosensory function.

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## **Burning Mouth Syndrome as a Focus of Delusion**

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**BACKGROUND:** Parasitosis is a fixed belief of being infested with pathogens against all medical evidence [Freudenmann RW, Lepping P, 2009] Method: Case Report: A 53 year old right handed female presented with progressively severe BMS for 1 years. She noticed that aromas would project from her nose into her mouth and would experience this taste for days. Looking at the source of the odor would precipitate her to sense the smell of the product, immediately followed by the taste and then burning of the tongue, mouth and vagina. Fumes would eminent from her mouth, nose and anus. Five days prior she stopped eating and drinking. She had not brushed her teeth, showered, nor bathed for 3 weeks. Odors smell like ammonia and blood, which upon inhalation, effuse into her mouth which tastes like chemicals. Thereupon, she immediately experiences burning of her tongue and palate.

**RESULTS:** Abnormalities: Disheveled: Cacosmious. Personal hygiene poor. Facial expression odd and inappropriate. Loud but low quantity of speech. Unable to interpret similarities or proverbs. Calculation: poor.

**CONCLUSION:** In those who present with BMS, query as to the delusional nature of their symptoms is warranted and may suggest a treatment strategy.

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## Long-Term Outcomes with Valbenazine 40 mg/day in Adults With Tardive Dyskinesia

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**ABSTRACT:** Study Objective: Tardive dyskinesia (TD), a persistent and potentially disabling movement disorder, is associated with prolonged exposure to antipsychotics and other dopamine receptor blocking agents. Valbenazine (VBZ) is a novel and highly selective vesicular monoamine transporter 2 (VMAT2) inhibitor approved for the treatment of TD in adults. Using data from two longterm phase 3 studies (KINECT 3 [K3], NCT02274558; KINECT 4 [K4], NCT02405091) and a rollover study (1506, NCT02736955), the long-term outcomes of oncedaily VBZ on TD were examined in participants who received 40mg or had a dose reduction from 80 to 40mg.

METHODS: The effects of VBZ 40mg (as well as VBZ 80mg) were evaluated in the following studies: the pivotal K3 study (6 weeks double-blind, placebo controlled), the extension phase of K3 (42 additional weeks of VBZ, 4 week discontinuation), and the open-label K4 study (48 weeks of VBZ, 4 week discontinuation). Completers from K3 extension and K4 were invited to participate in 1506 (up to 72 additional weeks of VBZ or until commercial availability of VBZ). Few participants reached Week 60 (n=4) or Week 72 (n=0) in the 1506 study before termination. Analyses focused on VBZ 40mg in two populations: pooled K3/K4 (participants who received VBZ 40mg throughout K3 or K4 or who had a dose reduction [80/40mg] during K3 or K4); and 1506 (participants who received VBZ 40mg from beginning of K3 or K4 to last visit in 1506 or who had a dose reduction [80/40mg] at any time). Outcomes for the K3/K4 population included mean change from baseline (CFB) in Abnormal Involuntary Movement Scale (AIMS) total score (sum of items 1-7) and AIMS response (≥50% total score improvement from baseline) at Week 48 of K3 or K4. Outcomes for the 1506 population included a Clinical Global Impression of Severity-Tardive Dyskinesia (CGIS-TD) score  $\leq 2$  ("normal, not at all ill" or "borderline ill").

**RESULTS:** In the K3/K4 population, AIMS CFB to Week 48 indicated mean TD improvements in participants who received 40mg continuously (40mg, -5.7 [n=54]) and in