therapeutic levels (2.5- 15mcg/ml), it has been reported that Lamotrigine is neuroprotective and improves cognition. At the time of overdose, our patient had a Lamotrigine level of 21.5mcg/ml. There is limited literature on cognitive effect of supra-thrapeutic levels of Lamotrigine. As such, a causal relationship cannot be determined from a single care report. Also in differentials to consider are schizophrenia and seizures from lamotrigine withdrawal.

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134
Improvements in Clinical Global Impression of Change With Deutetrabenazine Treatment in Tardive Dyskinesia From the ARM-TD and AIM-TD Studies

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ABSTRACT: Introduction: Tardive dyskinesia (TD) is an involuntary movement disorder that is often irreversible, can affect any body region, and can be debilitating. In the ARM-TDand AIM-TD studies, deutetrabenazine treatment demonstrated statistically and clinically significant reductions in Abnormal Involuntary Movement Scale (AIMS) scores at Week 12 compared with placebo (primary endpoint).

OBJECTIVE: To evaluate the efficacy of deutetrabenazine, as measured by the Clinical Global Impression of Change (CGIC) scale, in patients with TD from the pooled ARM-TDand AIM-TD (24 and 36 mg/day doses) data sets, as compared with the pooled placebo cohort.

METHODS: ARM-TD and AIM-TD were 12-week, randomized, double-blind, placebo-controlled studies that evaluated the safety and efficacy of deutetrabenazine for thetreatment of TD. The key secondary endpoint of each study was the proportion of patients "much improved" or "very much improved" (treatment success) at Week 12 on theCGIC.

RESULTS: At Week 12, the odds of treatment success among patients treated with deutetrabenazine (n = 152) was more than double that of patients given placebo (n = 107; odds ratio: 2.12; P = 0.005). In a categorical analysis of CGIC ratings, patients treated with deutetrabenazine showed greater improvement than patients given placebo (P = 0.003). Patients treated with deutetrabenazine also had a significantly better treatment response than those given placebo (least-squares mean CGIC score treatment difference: –0.4; P = 0.006).

CONCLUSIONS: Deutetrabenazine treatment led to statistically and clinically significant improvements in TD symptoms based on the CGIC result, suggesting that clinicians were able to recognize the benefit in patients treated with deutetrabenazine.

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135
Use of Pimavanserin in Combination With Selective Serotonin Reuptake Inhibitors (SSRIs)

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ABSTRACT: Study Objective: Psychosis is common in Parkinson's disease (PD) and increases in both frequency and severity with disease duration. It is associated withincreased morbidity/mortality, complicates management of motor symptoms and often leads to long-term care placement. Pimavanserin is a selective 5-HT2A inverse agonist/antagonist approved in the U.S. for treatment of hallucinations and delusions associated

with Parkinson's disease psychosis (PDP). Depression affects up to 60% ofPD patients and is frequently treated with SSRIs/SNRIs. Data suggest the potential for a synergistic effect between 5 HT2A receptor inverse agonist/antagonists and SSRIs insubjects with neuropsychiatric disease. This post-hoc analysis evaluated a subgroup of subjects from the pimavanserin clinical program to determine if there was any difference in antipsychotic response between the subjects receiving pimavanserin in combination with an SSRI versus those without.

METHOD: A pooled analysis of two 6-week randomized, double-blind, placebo-controlled Phase 3 studies was conducted to assess the overall treatment effect of pimavanserin34 mg. The outside-North America region in Study 012 was not included due to a difference in methodology in the assessment of the primary endpoint. Subjects in both the 020 and 012 studies received 42 days of treatment. The mITT population included 268 subjects; with 135 in the pimavanserin group. The full safety dataset included 433 subjects; with 202 in the pimavanserin group. Of the 268 subjects in the mITT population, a total of 77 received concomitant therapy with SSRIs. A subgroup analysis was conducted to determine if there was any difference in response among the subjects receiving concomitant SSRIs.

RESULTS: Overall, pimavanserin demonstrated a -6.21-point improvement in psychosis at Week 6 as measured by the PD-adapted Scale for Assessment of Positive Symptoms (primary change from baseline analysis [MMRM]). The treatment difference was 2.87 points over placebo ($p < 0.001$) and was clinically meaningful. Both subgroups (pimavanserin +/- SSRI) demonstrated a statistically significant improvement over placebo. Among subjects taking concomitant SSRIs, the decrease in psychosis symptoms was more prominent for both pimavanserin and placebo-treated subjects (-8.33 points and -4.01 points, respectively) compared to the 189 subjects not taking SSRIs (-5.36 points and -3.01 points, respectively); the treatment difference was of greater magnitude in the concomitant SSRI treated group (-4.32 vs. -2.34). A total of 10% (4/40) and 7.4% (12/162) of pimavanserin treated subjects, with and without SSRIs, respectively, discontinued because of adverse reactions.

CONCLUSIONS: The results of this analysis further support findings that the combination of selective 5-HT2A agonist/antagonists and SSRIs may have additive beneficial effects, suggesting a possible enhancement of antipsychotic effect in subjects treated with concomitant SSRIs.

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136
CerefolinNAC Therapy-Induced Dizziness

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ABSTRACT: Study Objective: CerefolinNAC (CFLN-NAC) contains L-methylfolate (6 mg), methylcobalamin (2 mg), and N-acetylcysteine [NAC] (600 mg) [Pamlab 2017]. Dizziness and lightheadedness have not heretofore been described with use of CFLN-NAC.

METHODS: Case Study: A 64 year old right-handed female was started on CFLN-NAC for smell and taste issues. Over a three day period, she experienced a gradual increase in dizziness. This was a non-vertiginous lightheadedness, so severe that she was unable to walk, and would lie down the entire day to alleviate the dizziness. It was associated with nausea, but without any vomiting or falls. The dizziness would come and go, last for several hours, and was 9/10 in severity.
She admits to a past history of epochs of vertigo. The vertigo occurred three times with nausea and vomiting 13 years, 11 years, and 4 years prior to presentation. She also developed a constant, bilateral, high-pitched tinnitus 14 years prior to presentation, which obstructs her hearing. It is level 3/10 in intensity during the night and in the quiet. There were no alleviating or aggravating factors. Acupuncture was without effect, and she denies any ear pain. After ceasing CFLN-NAC for three days, a gradual reduction of dizziness to baseline ensued.

RESULTS: Abnormalities in Physical Examination: General: Decreased blink frequency and hypokinesia. Cranial Nerve III, IV, VI: Saccadization of horizontal eye movements. Motor Examination: Tone: 1+ cogwheel rigidity in both upper extremities, left more than right. Drift Test: Bilateral Abductor Digiti Minimi sign with cerebellar spooning. Reflexes: Absent quadriceps femoris and Achilles bilaterally. Positive Hoffman reflex bilaterally. Neuropsychiatric Testing: Go-No-Go Test: 6/6 (normal). Animal Fluency Test: 19 (normal). Reliable Digit Span: 10 (normal). Clock Drawing Test: 4 (normal). Center for Neurologic Study Lability Scale: 10 (normal). Other: Audiometry and Fiberoptic Endoscopy: normal. MRI of the brain with and without contrast was normal.

CONCLUSION: None of the individual components in CFLN-NAC have been reported to precipitate dizziness [Pamlab 2017]. The non-vertiginous nature of the dizziness makes it unlikely to be due to vestibular involvement, raising the spectre of this drug having an impact on the autonomic nervous system. While a

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