A 70-Year-Old Woman with Restless Legs Syndrome and Insomnia

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A 70-year-old woman presented to our sleep center with her son for reassessment of restless legs syndrome (RLS) and insomnia in the context of taking benzodiazepines. She lived in an assisted-living facility and one of her daughters was her personal care attendant. The patient had a recent fall that led to a wrist injury. Her primary care provider was concerned that multiple hypnotics were a factor in her fall, so he referred her to our sleep center to review other options.

The patient described that on the night of the accident she was climbing the steps at her assisted-living facility when she slipped and fell awkwardly on her right wrist. She described intense pain at the time, along with some swelling. She was evaluated in the emergency department and an X-ray was performed, which showed no fracture.

At the time of her fall, the patient was taking 2 mg/day of clonazepam, 30 mg/day of temazepam, 100 mg/day of sertraline, 50 mg/day of trazodone, 10 mg/day of melatonin, and 50 mg/day of diphenhydramine. In addition, the patient had also been taking 5 mg of hydrocodone as needed (approximately once per day) for intermittent back pain. She described having symptoms of excessive worrying and felt agitated despite taking an extra dose of diphenhydramine, which she was told would help with anxiety but instead made her feel more restless.

She used to go to bed around 10 or 11 PM prior to her fall, and used to fall asleep within 30 minutes of taking her hypnotics. She began waking up in the middle of the night and would often watch television until she would get drowsy. She would then fall asleep in the morning around 5 or 6 AM and wake up later around 10 AM.

She also complained of poor sleep quality and feeling tired during the day. She also had started taking naps in the middle of the day. She, however, denied any snoring or witnessed apneas. Her Epworth sleepiness score was 14 (a score...
of 10 or more suggests excessive daytime sleepiness). A polysomnogram was not performed because it is not indicated for diagnosis of insomnia and if there are no concerns for other sleep disorders such as obstructive sleep apnea.

**DIAGNOSIS**

**Polypharmacy as a Cause of Falls and Worsening of Restless Legs Syndrome**

Given the recent fall, the sleep physician had a frank discussion with the patient and her son about the high risk of falls with multiple hypnotics. The diphenhydramine was also worsening her RLS symptoms. She was encouraged to begin tapering off clonazepam and diphenhydramine.

The patient was reluctant to stop taking clonazepam and diphenhydramine as she was worried about worsening of insomnia. Her sleep physician educated her about the long half-life of clonazepam and the possibility of antihistamines worsening RLS. She realized that whenever she took diphenhydramine, her RLS symptoms worsened, although it did make her drowsy. Her daughter mentioned that her mother seemed “confused” in the morning and complained of dry mouth, which could be caused by diphenhydramine.

The patient had initial resistance to the idea of a taper because she thought both the clonazepam and diphenhydramine were helping her significantly. After reviewing her history in more detail and providing other potential options, the patient became more amendable to tapering off clonazepam and diphenhydramine. She was also encouraged not to take naps during the daytime.

Blood tests showed normal ferritin levels. She was prescribed 100 mg of gabapentin after she discontinued clonazepam and diphenhydramine. She felt that a low dose of gabapentin was helpful in treating her RLS. Because she was no longer taking diphenhydramine, she was more alert in the morning. Temazepam was also reduced to 7.5 mg/day.

**DISCUSSION**

Sedatives and benzodiazepines increase the risk of falls in elderly patients. In addition, antihistamines have anticholinergic effects, which can worsen cognitive abilities. Most practitioners are unaware that antihistamines and antidepressants worsen RLS symptoms. There are a few case reports of antihistamines causing agitation in adults. The patient did not realize that adding more sedatives was counterproductive and causing her to be sedated during the daytime instead of helping her to sleep at night. Napping during the day can affect nighttime sleep. Anxiety and depression are more common in elderly patients with insomnia symptoms. Insomnia and sleep fragmentation is more common in elderly patients. Lack of structure could possibly play a role in poor sleep quality.

This case illustrates the importance of getting a complete medication history in an elderly patient. In this case, the patient was taking multiple hypnotics without tapering off the previous ones. In addition, she was self-medicating with over-the-counter antihistamines, which was worsening not only her sleep, but also her RLS. Psychiatrists and mental health providers should be aware of the risks of polypharmacy in the elderly. Benzodiazepines and sedative hypnotics, such as zolpidem, should not be considered as first-line treatment in this age group. Cognitive-behavioral therapy for insomnia, melatonin, and other safer options such as ramelteon, low-dose doxepin, or low-dose trazodone, and in this case, gabapentin, should be explored and used as first-line treatments.

**REFERENCES**