Long-Term Care Survey Alert

Clinical Management: Get The Pills Right For This Ill: Stave Off Common Pitfalls In Parkinson's Care

Your facility hasn't tried everything until it's done this.

Poorly managed Parkinson's disease can lead to falls, premature functional decline and a poor quality of life for residents with the condition -- not to mention a slate of disabling F tags for the facility.

The good news: By providing anti-Parkinson's medication in a way that helps prevent "peaks and valleys" in the patient's blood levels, you can hopefully prevent or reduce motor fluctuations that interfere with her functioning and lead to freezing and falls.

The medications that boost dopamine levels, which decline in Parkinson's disease, include levodopa with carbidopa. Levodopa turns into dopamine in the body. And "carbidopa prevents levodopa from being transformed into dopamine anywhere except for the brain," says **Mónica M. Kurtis, MD**, at **Columbia University Medical Center** in New York City.

"Levodopa primes the receptors to make them overly sensitive to dopamine, which is what makes people taking the drug develop dyskinesia or dancing movements as the disease progresses," Kurtis explains. Dyskinesias are a sign of being super "on," Kurtis says. Then when the effect of levodopa wears off, the person freezes or becomes sluggish and can't move, which is known as being "off," she notes.

Solution: More frequent, smaller dosing of Sinemet can help reduce the "on and off" periods seen in Parkinson's, says consulting pharmacist **Kitty Anderson** in Salt Lake City. "By using smaller, more frequent doses, we may be able to provide better pharmacological care for the movement disorder and possibly reduce dyskinesias."

What about using an extended-release formulation of levodopa with carbidopa?

The problem with the extended- release formula, says Kurtis, is that the patient doesn't always absorb the product well. And absorption becomes even more unreliable as the person's disease advances. Of course, "if the patient is doing well on the extended-release medication, then you would surmise that he is absorbing it," she says. But what tends to happen is a person will absorb one dose well and not another, she adds. The extended-release medication may get the patient through the night, Anderson says. "But during the day, an immediate-release formulation may be preferable. Fine-tuning the medication regimen is an art," she adds.

More Options in the Medicine Chest

If tweaking the levodopa with carbidopa regimen doesn't even out a nursing home patient's "peaks and valleys," you can add medications, which include the following, Kurtis says:

1. Entacapone (Comtan) or tolcapone (Tasmar). Those drugs inhibit the breakdown of dopamine so it prolongs a therapeutic blood level. When using tolcapone, you have to closely monitor liver enzymes, Kurtis cautions.

2. A dopamine agonist: pramipexole or ropinirole, if the resident doesn't have baseline cognitive problems. These drugs mimic the action of dopamine and have a longer half-life, Kurtis says. They can also cause memory problems and confusion, which is why Kurtis recommends against giving them to people with dementia.

3. Selegiline or rasagiline, which potentiate the action of levodopa.

Discharge teaching tip: Give the resident's family or caregiver a heads-up that pramipexole and ropinirole can produce obsessive-compulsive behavior, Kurtis advises. Some people have been known to gamble online, depleting life savings. The drug can also cause "sleep attacks," which could be a problem if the resident plans on driving after discharge or on a leave of absence from the facility, she cautions.

If the resident taking anti-Parkinson's medication has dyskinesias, says Kurtis, you can:

1. Increase the time interval between the medication doses (levodopa/carbidopa) and lower the total dose if the resident has peak-dose dyskinesias; or change to an extended-release formula, which actually provides a lower dose of dopamine, she notes. If the patient's Parkinson's symptoms worsen, add an agonist.

2. Add amantadine, which decreases the dopamine action on those super-sensitive receptors that produce the dyskinesias, Kurtis explains.

Interdisciplinary Reassessment, Focus a Must

The interdisciplinary team should assess the resident's baseline functioning upon admission. Then reassess the person regularly to look for progression of Parkinson's disease symptoms in order to change the treatment plan, if needed, advises **Dee Kostolich, RN**, a consultant with **Howard Wershbale & Co**. in Cleveland. Also, if the patient falls, re-evaluate whether he needs additional interventions or a change in medication, she advises.

Tip: If a resident requires antipsychotics to treat psychotic symptoms, which can occur as part of the disease or in response to anti-Parkinson's medications, consider using clozapine or quetiapine; these don't tend to cause as many extrapyramidal symptoms as other antipsychotics, which can cause falls. Clozaril (clozapine) does require blood test monitoring, so most nursing home physicians choose Seroquel (quetiapine), Anderson says.

Monitor and document: "Any time a medication is prescribed, the team should monitor the patient to see if the medication is helping or potentially causing problems," adds Kostolich. "Many times, the physician will simply phone in an order and no one really monitors and documents the effect of the medication," she cautions.

Editor's note: For a free copy of an MDS Alert article on how to use the MDS to identify common clinical issues that occur in Parkinson's disease, e-mail your request to the editor at KarenL@Eliresearch.com.