

## Long-Term Care Survey Alert

### Medication Management: Caring for Patients With Parkinson's Sx? This Review Could Provide a Critical Clue

Your astute assessment could cure the person's symptoms.

If you automatically think Parkinson's disease when you see a patient with Parkinson's symptoms, you may be missing a critical assessment step. When "a patient comes into the facility with Parkinson's symptoms or develops symptoms while in the facility, do a careful medication review to look at their current and past medications," advises **Brian J. Gates, PharmD**, at Washington State University in Spokane.

Clinical rationale: Parkinson's disease is due to dopamine deficiency in the brain. And some drugs block dopamine, which can cause Parkinson's symptoms in people who don't actually have the disease.

Look for These Common Culprits

Check for these drugs known to cause Parkinson's type symptoms:

Dopamine-blocking agents.

The older generation of antipsychotics, such as Haldol, is perhaps the most notorious for causing Parkinson's type symptoms, which are usually referred to as extrapyramidal symptoms (EPS). But don't be fooled: While the atypical antipsychotics tend to be less likely to cause the problem, they can do so, depending on the dose, Gates cautions.

Some anti-nausea medications also block dopamine. These include metoclopramide, which is used to treat nausea and also gastroparesis, a condition most common in people with diabetic-related nerve damage, Gates says. Other anti-nausea medications, such as prochlorperazine, also block dopamine while others, such as Zofran (ondansetron), don't, he adds.

SSRI antidepressants. The SSRIs are known to induce abnormal movements, noted **Herbert Sier, MD, CMD**, in a presentation on Parkinson's disease at the March 2010 American Medical Directors Association annual meeting. While the SSRIs affect serotonin, Gates explains, they may produce indirect effects on dopamine that contribute to the Parkinson's symptoms. Thus, "it's worthwhile to evaluate the possibility of SSRIs causing problems," if the patient isn't taking dopamine-blocking agents, such as an anti-nausea medication.

Anticonvulsants. "Anticonvulsants can cause some movement disorders although these are usually tremors," says Gates. By contrast, "some of the drugs that block dopamine produce more Parkinson's symptoms overall, such as rigidity and trouble moving rather than just a tremor."

#### Assume Symptoms May Be Reversible

Whether the Parkinson's symptoms go away when you stop the medication depends on the medication and other factors.

SSRI-related "symptoms do seem reversible," Gates says. And "the tremor associated with anticonvulsants would normally go away when you stop the drug," although that's not a certainty. But the tremor is likely due to the medication's effect on the person's central nervous system, he notes.

#### On the other hand:

Antipsychotics that block dopamine over long time periods do appear to cause more permanent symptoms, Gates observes. Ditto for symptoms caused by metoclopramide. Even so, "symptoms can be reversible if caught early enough,

and in my experience, this does seem to vary with each patient."

Best practice: Consider doing the AIMS (Abnormal Involuntary Movement Scale) on patients taking antipsychotics, if your team isn't already performing this assessment

(<http://rolla.mo.networkofcare.org/dd/CountyContent/rolla/AbnormalInvoluntaryMovementScaleDirections.pdf>).

#### Check These Meds for Patients With PD

If a resident with PD shows worsening Parkinson's symptoms, do a medication review to see if he's on a medication that could be causing or exacerbating the problem.

For example, Parkinson's drugs themselves can cause nausea and psychotic symptoms (hallucinations and delusions). And if the clinician doesn't look to see if perhaps lowering the Parkinson's drug might help eliminate those problems, he may sometimes treat the person with dopamine-blocking anti-nausea medication or antipsychotics. And this can undermine the person's Parkinson's therapy, Gates cautions.

Instead: "The best way to determine whether a person's psychotic symptoms might be caused by [Parkinson's medications such as] Sinemet or a dopamine agonist would be to taper the medication down and observe if the psychosis lessens," says **Katherine Anderson, PharmD, CGP**, at Harding University College of Pharmacy in Searcy, Ark. However, "sometimes the psychosis is a part of the Parkinson's disease and will persist" even though the clinician lowers the Parkinson's medication dose.

In some cases, the clinician may have to add an antipsychotic, but the drug should be given at a low dose, Gates counsels. "For Parkinson's patients, the antipsychotic quetiapine is often used" for that purpose because it's associated with less EPS.

Studies indicate that clozapine may be the best antipsychotic for treating psychosis in PD, but the drug can cause neutropenia which requires ongoing blood testing to identify (see Clin Neuropharmacol. 2003 Jan-Feb;26(1):8-11 at [www.ncbi.nlm.nih.gov/pubmed/12567158](http://www.ncbi.nlm.nih.gov/pubmed/12567158)).