What's New in the Patient Safety World

June 2015

More Risks for Parkinson Inpatients

We've done a couple previous columns highlighting the problems that patients with Parkinson's Disease run into when they get hospitalized for any reason (see our What's New in the Patient Safety World columns for August 2011 "Problems Managing Medications in Parkinson's Disease" and December 2012 "More on Hospitalized Parkinson's Disease Patients"). Patients with Parkinson's typically require specific timing of their medications in order to minimize the "on-off" phenomenon and to avoid hyperkinesias. This results in their requiring multiple dosing throughout the day and often at unusual times. Meeting this very precise timing of doses is problematic for most hospitals and hospital units because they are used to their own standardized times for medication dispensing and administration. And most anti-Parkinsonian medications are available only in oral form so it is especially problematic when the patient is NPO or is otherwise unable to swallow. Some anti-Parkinson's formulations are also of the extended-release variety and should not be crushed. Moreover, drugs that worsen extrapyramidal function are often used in the hospital and these may significantly worsen Parkinsonian features. Patients with Parkinson's also seem to get temporary declines in function when they get a systemic problem, like an infection.

ISMP has recently done another column on this very problem (ISMP 2015). They provide two case examples that illustrate some of these critical problems. In one case, there was a several hour delay in getting the patient's medications even though she informed hospital staff immediately about the doses and times. The hospital then scheduled her medication administration for the standard hospital medication administration times. As a result several hours went by in which the patient failed to receive her medications. This led to accentuation of difficulty talking and communicating, increased tremor and difficulty walking. She then became confused and agitated and was given haloperidol, which further worsened her Parkinsonian state.

In the second case, a Parkinson's patient did not receive his anti-Parkinsonian medications when his wife was not present at the bedside. He, too, was given a contraindicated medication when he developed hallucinations and lost the ability to communicate until his medications were readjusted to the schedule he used at home.

In our December 2012 What's New in the Patient Safety World column "More on Hospitalized Parkinson's Disease Patients") we noted a study from The Netherlands (Gerlach 2012) found that 21% of Parkinson patients admitted to a hospital experienced

deterioration of motor function and 33% had one or more complications. Moreover, 26% received incorrect anti-Parkinson medications, which was the most significant reason associated with clinical deterioration. And somewhat surprisingly, the researchers found the situation no better in those patients admitted to neurological wards rather than other wards. This simply suggests an overall relative lack of understanding of Parkinson's disease in healthcare workers who work primarily in inpatient settings. It also reflects some of the rigid medication administration practices we have in most hospitals. Interestingly, in the new ISMP column the first patient scheduled a subsequent elective admission to a hospital where her neurologist worked but she ran into all the same problems even under that arrangement.

ISMP goes on to provide a list of important actions that should be undertaken for inpatients with Parkinson's Disease:

- Expedite medication reconciliation
- Develop a unique medication administration schedule for such patients
- Avoid delays for nonformulary agents
- Know the symptoms and signs of Parkinson's
- Avoid contraindicated drugs
- Build alerts (eg. to avoid disease-medication interactions or drug-drug interactions)
- Get a neurology consultation
- Manage NPO status
- Do not abruptly discontinue medications
- Promote swallowing
- Schedule any surgery with medication optimization in mind
- Focused staff education
- Patient education

We encourage you to read the ISMP article for details under each of the above bullet points.

It's tough enough to manage Parkinson's Disease as an outpatient. Recognizing these vulnerabilities when patients with Parkinson's are admitted to hospitals is a first step in preventing complications, minimizing hospital lengths of stay, and avoiding functional deterioration.

References:

ISMP (Institute for Safe Medication Practices). Delayed administration and contraindicated drugs place hospitalized Parkinson's disease patients at risk. ISMP Medication Safety Alert! Acute Care Edition. March 12, 2015 http://www.ismp.org/newsletters/acutecare/showarticle.aspx?id=103

Gerlach OHH, Broen MPG, van Domburg PHMF, et al. Deterioration of Parkinson's disease during hospitalization: survey of 684 patients. BMC Neurology 2012, **12**: 13 (8 March 2012)
http://www.biomedcentral.com/1471-2377/12/13

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