Do you know how to monitor an older adult who’s receiving an antipsychotic drug? Learn the benefits and the pitfalls so you can keep your older patients safe.

By Lisa M. Abdallah, RN, PhD; Ruth Remington, ANP, GNP-BC, PhD; Karen Devereaux Melillo, ANP-BC, GNP, PhD, FAANP; and Jane Flanagan, ANP-BC, PhD

MANY OLDER ADULTS suffering from dementia receive antipsychotic drug therapy. So, whether you care for older adults in a long-term-care facility or a hospital, you may be administering these drugs to them. In this article, we’ll discuss these drugs, how to assess your patient who’s using them, and how to use nondrug interventions. But first, let’s look at why an antipsychotic drug may be indicated for an older adult.

Looking at the statistics

Nearly 10% of all people over age 65 and up to 50% of those over age 85 are thought to have Alzheimer’s disease (AD) or another form of dementia. During hospitalization, many older adults experience depression or delirium. In addition, some older patients have preexisting psychiatric diseases such as schizophrenia or bipolar disorder. All in all, 33% to 63% of long-term-care patients are prescribed psychotropic drugs. Antipsychotic drugs are some of the most commonly prescribed psychotropic drugs in long-term-care facilities today. If a patient taking one of these drugs is admitted to your unit for treatment of an acute illness, you’ll be responsible for helping to manage her drug regimen. Let’s take a closer look at this class of drugs.

Dementias spur more usage

Antipsychotic medications are indicated to treat schizophrenia and other psychotic disorders and to manage aggressive behaviors associated with psychosis. For older adults, they’re often used to treat signs and symptoms of psychosis and agitated behaviors related to AD and other dementias. However, a major retrospective study recently found that using antipsychotic drugs in older patients with dementia even for a short time increases their risk of being hospitalized or dying.

Antipsychotic drugs can be classified as typical (first-generation or standard) or atypical (new-generation or novel). Low-potency typical antipsychotic drugs, such as chlorpromazine (Thorazine), aren’t tolerated well by older adults because of their anticholinergic and sedating effects. At low doses, high-potency typical antipsychotics such as haloperidol (Haldol) are better tolerated and have been the drugs of choice for older adults.

In recent years, however, the newer atypical antipsychotics such as olanzapine (Zyprexa) have gained favor. These drugs were thought to cause fewer adverse reactions, especially those involving abnormal muscle movements, in older adults. But ongoing research about their safety has made this view controversial. Several studies of atypical antipsychotics in patients with dementia have found no evidence that these drugs are any safer or more effective than older antipsychotic drugs.

In 2005, the FDA issued a warning that older adults who’ve been treated with atypical antipsychotic medications for behavioral disorders related to dementia have increased mortality compared with those taking a placebo. Causes of death include heart-related problems (heart failure, sudden death) or infections (mostly pneumonia). The FDA requires these drugs to carry a warning label about the risks of therapy. A meta-analysis conducted after the warnings went into effect concluded that atypical antipsychotic drugs carry a small but statistically significant increased risk of death compared with placebo.

In published guidelines, the Centers for Medicare and Medicaid Services (CMS) prohibits giving antipsychotic medications to patients unless they have a specific condition or diagnosis (such as schizophrenia or Tourette’s disorder) that’s well documented. (See When can antipsychotics be used?) In addition, brain dysfunction due to physical or physiologic problems (rather than psychological problems) associated with psychotic or agitated behaviors is an acceptable indication for antipsychotic drugs if these behaviors have been documented and under-
DRUGS SAFELY in older patients

lying environmental, psychosocial, and medical causes have been ruled out.

Under CMS guidelines, antipsychotic therapy is appropriate when the patient’s signs and symptoms:
• are persistent and not due to reversible causes
• are dangerous to the patient or others
• impair the patient’s ability to function
• cause the patient distress.8

These drugs may also be prescribed for the short-term treatment (7 days) of hiccups, nausea, vomiting, or pruritus.

Antipsychotic drugs shouldn’t be used for inappropriate reasons, including wandering, poor self-care, impaired memory, anxiety, depression (without psychotic features), insomnia, or agitation that isn’t a danger to the patient or others. If an antipsychotic drug is prescribed, the CMS guidelines call for clinicians to gradually reduce the dosage and institute behavioral interventions so the drug can be discontinued as soon as appropriate. The guidelines also require clinicians to document that:
• the drug has been prescribed for an appropriate reason
• the patient is taking the minimal effective dose
• the patient is being closely monitored for adverse reactions, particularly tardive dyskinesia (repetitive, involuntary, purposeless movements caused by long-term use of neuroleptic drugs), orthostatic hypotension, cognitive or behavioral impairment, akathisia (restlessness or inability to be still), and parkinsonism.7

Now let’s review why older adults are more susceptible to adverse drug reactions.

A matter of age
Normal age-related changes can alter the way any drug is metabolized, increasing the risk of toxicity. To complicate matters, older adults may take many other medications, setting the stage for potentially dangerous drug interactions.

Compared with younger patients, older patients are much more vulnerable to adverse reactions associated with antipsychotic drugs, including sedation, orthostatic hypotension, changes in heart rate and rhythm, and decreased appetite. Any antipsychotic medication can interfere with temperature regulation. These adverse reactions also put them at a high risk for falls and fractures and other serious complications. So how do you administer these drugs safely to your older patient?

First, you’ll need to obtain your patient’s history. Find out what other medications she’s taking and make sure the antipsychotic drug chosen doesn’t interact with or enhance any actions of her other drugs. Perform medication reconciliation and flag any drugs in her regimen that may be unnecessary to reduce her “pill burden.”

Is it delirium or dementia?
Next, perform a physical assessment. Assess your patient for any change in her baseline cognitive level and behavior. If she’s a new patient, you may need to ask a family member or caregiver if he sees changes in her behavior. Before she starts on antipsychotic therapy, try to sort out whether her behavior is related to dementia or new-onset delirium, which probably has a treatable cause. Being in an unfamiliar environment like a hospital may precipitate delirium, an acute state of confusion that’s common in older patients and constitutes a serious medical emergency.

An abrupt cognitive change can be a telltale sign of an acute medical condition such as a newly acquired infection, medication effect, or pain that may be

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Source: Saltz BL, et al., 2000.9
causing a change in behavior. Notify your patient’s health care provider of any abnormal assessment findings or diagnostic study results.

Medications are a common cause of delirium in older patients. Review the patient’s medication record to determine if the onset of delirium is related to any newly prescribed medications. Medications that are more likely to cause delirium in older adults are: antipsychotics, cardiac medications, histamine₂ antagonists (such as cimetidine and ranitidine), analgesics, anti-inflammatory drugs, and over-the-counter drugs, especially those with associated anticholinergic adverse reactions, such as cold medicines and sedatives.²

Detailed information about some potentially inappropriate medications for older adults, known as the Beers’ Criteria, can be found at the Hartford Institute for Geriatric Nursing Web site at http://www.hartford.org/publications/trythis/issue16.pdf. Some of these medications are inappropriate because of the frequency and severity of their adverse reactions. These criteria have limitations and don’t identify all potentially inappropriate medications for older adults. This list isn’t a substitute for sound professional judgment about your patient’s individual medical needs.

Look for these effects

Once medical, pharmacologic, and other treatable causes of your patient’s behavior have been ruled out, her health care provider may prescribe an antipsychotic. If she’s taking this medication, you’ll need to assess her for these common adverse reactions to antipsychotic drugs:

- **Anticholinergic effects**, the most common problem associated with antipsychotic drugs, include constipation, dry mouth, urinary retention, blurred vision, and increased intraocular pressure. In addition, anticholinergic effects can affect the central nervous system, leading to disorientation and short-term memory loss. If these effects are severe, your patient may experience visual hallucinations and increased agitation. Document your patient’s baseline cognitive level and closely monitor her for signs and symptoms of central or peripheral anticholinergic effects.⁸

- **Orthostatic hypotension** increases the risk of falls and fractures. Assess your patient’s fall risk and institute fall risk precautions, if needed. Teach her to change position slowly and to drink enough fluids to avoid dehydration.

- **Neuroleptic malignant syndrome** is an uncommon but potentially life-threatening adverse reaction that usually occurs shortly after a patient starts taking an antipsychotic medication. It causes hyperthermia, muscle rigidity, tachycardia, and hypotension or hypertension. If your patient develops these signs and symptoms, call her health care provider or your facility’s rapid response team.⁹

- **Parkinsonism**, including tremors, increased muscle tone, bradykinesia (slow movements), drooling, and unstable shuffling gait, usually disappears when the patient is switched to lower-dose therapy or an atypical antipsychotic because its parkinsonism effects may be less severe.⁹

- **Akathisia** (restlessness or the inability to sit still) may improve with a lower drug dosage.⁹

- **Dystonia**, which occurs less commonly in older adults, is described as sustained muscle contractions. The patient may also exhibit repetitive twisting movements or abnormal postures. If it occurs soon after she begins antipsychotic medications, the dose should be lowered immediately. Treatment may also include anticholinergics or antiepileptic medications. More often, dystonia develops with continued use of antipsychotic medications and may not be reversible.⁹

- **Tardive dyskinesia** involves involuntary, repetitive, and purposeless movements, especially of the lower face, such as tongue thrusting, repetitive chewing, jaw swinging, or facial grimacing. These movements may be reversed if the antipsychotic medication is stopped early on, but they may become permanent in an older adult. The risk of developing tardive dyskinesia may be reduced by using low-dose therapy, discontinuing antipsychotic medications, or using an atypical antipsychotic.⁷

- **Agranulocytosis**, a serious blood dyscrasia that decreases white blood cell production, is specifically linked to clozapine (Clozaril). Because of this effect, it isn’t a drug of choice for older adults.³

- **Hyperglycemia and diabetes mellitus** in older adults is associated with most atypical antipsychotics except aripiprazole (Abilify), which doesn’t appear to affect glucose metabolism.¹⁰ If your patient’s receiving one of these antipsychotics, she should have periodic blood glucose monitoring.

**Key observations**

You’ll need to perform a physical assessment before your patient is started on antipsychotic treatment, then monitor her response to treatment. Your assessments will help the prescriber choose an appropriate drug and dose and modify therapy if necessary.

After your patient starts on antipsychotic medication, monitor her closely for both beneficial and adverse drug effects.
effects. Assess her daily when she first starts therapy, then at least weekly.

Never hesitate to contact the prescriber anytime you have a concern about your patient’s behavior. If she doesn’t improve within 4 weeks, alert the prescriber, who’ll reevaluate her. She may benefit from a change in dosage or medication.

If her behavior improves and remains stable, also inform the prescriber, who may order a dose reduction if indicated. In addition, the prescriber may order drug holidays or try to taper and discontinue the drug treatment. Giving the lowest effective dose of the medication will minimize potential adverse reactions.²

Obtain postural vital signs to assess for orthostatic intolerance and monitor for increases in body temperature. Also frequently monitor your patient for abnormal movement disorders.

Antipsychotic medications are generally contraindicated for patients with Parkinson’s disease—except for those with parkinsonian dementia with psychosis. These patients may need drug therapy if they have distressing symptoms, such as hallucinations, delusions, and paranoia, or if they’re a threat to harm themselves or others. Some antipsychotic medications are less likely than others to aggravate Parkinson’s disease symptoms. Clozapine or quetiapine (Seroquel) are preferred for a patient with Parkinson’s disease and olanzapine and risperidone (Risperdal) should be used with caution.³

Any patient taking an antipsychotic medication should be evaluated frequently using the Abnormal Involuntary Movement Scale test to assess for abnormal movements that can indicate tardive dyskinesia, starting with initiation of antipsychotic treatment. Then she’ll need to see her health care provider to be assessed every 6 months. If these adverse reactions do begin, she may need to discontinue the antipsychotic medication or switch to a different medication. Most important, you should look at how you can incorporate nonpharmacologic interventions, outlined next, to help manage the patient’s behavior whether she’s taking an antipsychotic or not.

**Try a new approach**
You should always try nonpharmacologic measures to deal with a patient’s agitated behavior when you can. Many interventions based on behavior models have been successful in managing dementia-related behaviors. With the patient’s permission, ask her family or friends to bring in supplies and engage her in activities such as games or crafts she enjoys.

Other behavioral theories are based on the belief that patients with dementia can’t cope with stress. Using interventions that ease stressful situations may decrease agitation. For example:
- speak in a calm, reassuring way
- provide an atmosphere of acceptance
- teach staff to approach a patient calmly and to explain their actions
- give her a few realistic choices about certain aspects of her care, such as whether to have a bath in the morning or evening.

An environment that’s not stimulating enough can also trigger agitated behavior. If this is the case, encourage her visitors or hospital volunteers to entertain her. You can also give her repetitive tasks, like folding towels.

Using consistent routines and providing adequate rest can help decrease agitated behaviors. Ask her simple questions such as, “Do you want tea or coffee?” rather than “What do you want to drink?” Too many choices can be overwhelming. Asking her about significant pleasant life events can help to trigger soothing memories.

Music has a positive effect on patients with agitated behaviors. Ask family members to bring in audiotapecs or CDs of soothing music or any music the patient likes. Other strategies that work for some patients include therapeutic touch, hand massage, and pet therapy.

**Teaching the family**
If a patient has symptoms or behaviors that are frightening to the family but not to the patient, you may need to educate them about why medications aren’t appropriate. If antipsychotic drugs are appropriate for the patient, teach family members that the drugs need time to work so they don’t expect to see improvements overnight. If nondrug approaches are appropriate, teach the family about them and enlist their help in the hospital and after discharge.

Your well-informed nursing care will help to maintain your older patient’s dignity and quality of life.

**REFERENCES**

Lisa M. Abdallah is an assistant professor, Ruth Remington is an associate professor, and Karen Devereaux Melillo is professor and chair of the Department of Nursing at the School of Health and Environment at the University of Massachusetts Lowell. Jane Flanagan is an assistant professor at the Connell School of Nursing at Boston College. Dr. Abdallah is also a John A. Hartford Institute Geriatric Nursing Scholar at New York (N.Y.) University.

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