

## Behavioral and Psychiatric Symptoms of Alzheimer's Disease

Alzheimer's disease does more than rob people of their memories; people with Alzheimer's actually experience two different kinds of symptoms. The first, which are referred to as cognitive symptoms, disrupt memory, language and thinking. The second, known as behavioral and psychiatric symptoms, can cause personality changes and agitation.

Many people with Alzheimer's and their families find behavioral symptoms to be the most challenging and distressing effects of the disease. These symptoms are often a determining factor in a family's decision to place a loved one in residential care. They also often have an enormous impact on the care and quality of life for people living in long-term care facilities. That's why recognizing the symptoms, understanding the cause and knowing treatment options are so important.

### What are behavioral and psychiatric symptoms of Alzheimer's disease?

The term "behavioral and psychiatric symptoms" refers to a large group of symptoms that occur in many — but not all — individuals with Alzheimer's. In early stages of the disease, people may experience irritability, anxiety or depression. In later stages, other symptoms may occur, including:

- Sleep disturbances
- Physical or verbal outbursts
- Emotional distress
- Restlessness, pacing, shredding paper or tissues and yelling
- Delusions (firmly held belief in things that are not real)
- Hallucinations (seeing, hearing or feeling things that are not there)

### Causes of behavioral and psychiatric symptoms

The chief cause of behavioral and psychiatric symptoms is the progressive deterioration of brain cells. However, medication, environmental influences and some medical conditions can also cause symptoms or make them worse.

For example, behavioral symptoms can sometimes be traced to an underlying medical condition. Anyone experiencing behavioral symptoms should receive a thorough medical evaluation, especially when symptoms appear suddenly. Examples of treatable conditions that can trigger behavioral symptoms include infections of the ear, sinuses, urinary or respiratory tracts; constipation; and uncorrected problems with hearing or vision.

Side effects of prescription medication are another common contributing factor to behavioral symptoms. Side effects are especially likely to occur when individuals are taking multiple medications for several health conditions, as that creates the potential for drug interactions.

The following situations and environmental conditions can also trigger behavioral symptoms:

- Moving to a new residence or nursing home
- Changes in the environment or caregiver arrangements
- Misperceived threats

## **Treatment**

With proper treatment, symptoms can be significantly reduced and stabilized. Successful treatment depends on recognizing which symptoms the person is experiencing, making a careful assessment and identifying possible causes of the symptoms. Treatment often takes a two-pronged approach: non-drug treatment strategies and prescription medication. Non-drug approaches should always be tried first.

## **Non-drug treatment strategies**

Steps to developing non-drug management strategies include:

1. Identifying the symptom
2. Understanding its cause
3. Adapting the caregiving environment to remedy the situation

Correctly identifying what triggered the behavior can help in selecting the best intervention. Often, the trigger is some sort of change in the person's environment, such as change in caregiver or in living arrangements; travel; admission to a hospital; presence of houseguests; or being asked to bathe or change clothing.

## **Adapting the environment**

A key principle of intervention is redirecting the person's attention, rather than arguing or being confrontational. Additional strategies include:

- Simplifying the environment, tasks and routines
- Allowing adequate rest between stimulating events
- Using labels to cue or remind the person
- Increasing the safety of the environment by equipping doors and gates with locks, and removing guns and other weapons
- Using lighting to reduce confusion and restlessness at night

In addition, these tips can help prevent agitation:

- Create a calm environment
- Remove stressors, triggers or danger
- Move the person to a safer or quieter place
- Offer a security object, rest or privacy
- Provide an opportunity for exercise

Also try to avoid environmental triggers, such as noise, glare and too much background distraction, including television. Monitor the person's personal comfort by checking for pain, hunger, thirst, constipation, full bladder, infections and skin irritation; ensure a comfortable temperature; be sensitive to fears and frustration with expressing what is wanted.

## **Helpful hints when a person becomes agitated**

**Do:** Back off and ask permission; use calm, positive statements; reassure; slow down; add light; offer guided choices between two options; focus on pleasant events; offer simple exercise options, try to limit stimulation.

**Say:** May I help you? Do you have time to help me? You're safe here. Everything is under control. I apologize. I'm sorry that you are upset. I know it's hard. I will stay with you until you feel better.

**Do not:** Raise voice; show alarm or offense; corner, crowd, restrain, demand, force or confront; rush or criticize; ignore; argue, reason, or explain; shame or condescend; or make sudden movements out of the person's view.

### **Medications to treat behavioral symptoms**

If non-drug approaches fail after they have been applied consistently, introducing medications may be appropriate when individuals have severe symptoms or have the potential to harm themselves or others. Medications can be effective in some situations, but they must be used carefully and are most effective when combined with non-drug approaches.

Medications should target specific symptoms so their effects can be monitored. In general, it is best to start with a low dose of a single drug. Effective treatment of one core symptom may sometimes help relieve other symptoms. For example, some antidepressants may also help people sleep better.

Individuals taking medications for behavioral symptoms must be closely monitored. People with dementia are susceptible to serious side effects, including stroke and an increased risk of death from antipsychotic medications. Sometimes medications can cause an increase in the symptom being treated. Without careful evaluation, some medical providers will increase rather than decrease the dose, putting the person at greater risk. Risk and potential benefits of a drug should be carefully analyzed for any individual.

Some examples of medications commonly used to treat behavioral and psychiatric dementia symptoms are discussed in the following sections. These lists do not include every drug used for these purposes. Doctors base their choice of medication on many factors, including the underlying cause of dementia and an individual's symptoms, living situation, caregiving arrangement and coexisting health conditions.

When considering use of medications, it is important to understand that no drugs are specifically approved by the U.S. Food and Drug Administration (FDA) to treat behavioral and psychiatric dementia symptoms. Some of the examples discussed here represent "off label" use, a medical practice in which a physician may prescribe a drug for a different purpose than the ones for which it is approved.

### **Antidepressant medications**

Antidepressant medications for low mood and irritability include:

- Citalopram (Celexa)
- Fluoxetine (Prozac)
- Paroxetine (Paxil)
- Sertraline (Zoloft)
- Trazodone (Desyrel)

### **Antipsychotic medications**

Antipsychotic medications for such symptoms as hallucinations and delusions include newer "atypical" agents such as aripiprazole (Abilify), olanzapine (Zyprexa), quetiapine (Seroquel), risperidone (Risperdal) and ziprasidone (Geodon) and older first-generation drugs such as haloperidol (Haldol). The decision to use an antipsychotic drug needs to be considered with extreme caution.

A recent analysis shows that atypical antipsychotics are associated with an increased risk of stroke and death in older adults with dementia. The FDA has asked manufacturers to include a “black box” warning about the risks and a reminder that they are not approved to treat dementia symptoms. The warning states: “Elderly patients with dementia-related psychosis treated with atypical antipsychotic drugs are at an increased risk of death compared to placebo.”

The analysis states that while risperidone and olanzapine are useful in reducing aggression and risperidone reduces psychosis, both drugs are associated with severe side effects. Despite some efficacy, these drugs should not be used routinely with dementia patients, unless the person is in severe distress or there is a marked risk of harm.

To maximize the chances of effectiveness, the choice of a particular drug, how long it should be used, and when it should be discontinued all need to be carefully tailored to an individual's symptoms and circumstances. The underlying cause of a person's dementia may also influence the selection of a drug. For example, it is generally considered inadvisable for individuals with dementia with Lewy bodies (DLB) to take antipsychotic drugs.

Although antipsychotics are among the most frequently used medications for treating agitation, some physicians may prescribe an anticonvulsant/mood stabilizer, such as divalproex (Depakote), for hostility or aggression.

### **Anti-anxiety drugs**

Anti-anxiety drugs for anxiety, restlessness, verbally disruptive behavior and resistance include:

- Drugs such as lorazepam (Ativan) and oxazepam (Serax) for short-term treatment of acute symptoms
- Antidepressants may be used for longer-term treatment

### **Medications for sleep problems**

Most doctors tend to avoid prescribing traditional sleeping pills for older adults with dementia, as the drugs can have serious side effects, including incontinence, problems with balance, falls or increased agitation. One widely used alternative is the antidepressant trazodone (Desyrel), which tends to make people sleepy. Anti-anxiety medications are also sometimes used.

Doctors also recommend that individuals with dementia avoid over-the-counter sleep aids. The active ingredient in many of these medications is diphenhydramine (Benadryl), an antihistamine that makes people feel drowsy. Diphenhydramine further suppresses the activity of one of the main brain cell messenger chemicals whose activity is reduced by Alzheimer's.

Examples of over-the-counter sleep aids containing diphenhydramine that should be avoided include Compoz, Nytol, Sominex and Unisom. Diphenhydramine is also an ingredient in many “nighttime” or “PM” versions of popular pain relievers and cold and sinus remedies.

The Alzheimer's Association is the leading voluntary health organization in Alzheimer care, support and research.

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