Do Antidepressants Affect Cognitive Decline? What Huntington's Disease Families Should Know

Recent research suggests a connection between antidepressant use and increased cognitive decline in people with dementia. How should these findings be interpreted for people with Huntington's disease?

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Two recent studies offer fresh insights into how antidepressants, often prescribed to help manage mood and anxiety, are prescribed in Huntington's disease (HD) and might also influence cognitive decline. One study zooms in on medication use in HD, while the other takes a broader look at dementia and antidepressants. Together, they reveal a complex and evolving map of treatment decisions.

Evolving HD Medication Landscape

The first study examined medication use among people with HD, using data from thousands of people in Enroll-HD, the largest observational study of the disease. Among other things, Enroll-HD collects data on what medications are most commonly used during HD care. One striking finding? A staggering 84% of people with HD use at least one medication, with this number climbing as the disease progresses.

A new study suggests that antidepressants, specifically SSRIs, may accelerate cognitive decline in people with dementia. Since SSRIs are frequently prescribed to people with Huntington's disease, these findings highlight the need for a thoughtful, individualized approach to treatment for HD.

In the early stages, people with HD take an average of 2.5 medications. But as the disease advances, that number more than doubles to 5.2. This really highlights just how much a person's medical needs change as HD progresses.

So, what medications are people taking? The study found that antipsychotics (used to manage movement symptoms and psychiatric issues), selective serotonin reuptake inhibitors (SSRIs, a common class of antidepressants), and painkillers (for chronic discomfort associated with HD) top the list.

Surprising Factors

But here's where things get really interesting—prescription patterns vary based on factors like disease stage, gender, and location. For instance, men with HD are more likely to be prescribed antipsychotics, while women tend to use more antidepressants and painkillers. The geographical divide is equally fascinating: In North America, SSRIs are the go-to choice, whereas in Europe, doctors are more likely to prescribe antipsychotics.

Why? It could be differences in treatment guidelines, cultural attitudes toward medications, or even drug cost and availability. Whatever the reason, this variation suggests that medication choices might be influenced by more than just individual patient needs.

What's important here is that this study actually looked at what medications people were using, not just what their doctors recommended. So this gives us a much more realistic picture of what's actually happening. This is valuable because it gives us a peek into the real world, the lived experience of these folks who are dealing with HD on a day-to-day basis.

Treatment Shift

Another crucial takeaway from the study is how medication use shifts over time. Early on, doctors may focus on medications that aim to manage mood and anxiety. But as involuntary movements and challenging behaviors become more prominent, treatment shifts toward managing these more disruptive symptoms.

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This shift is particularly evident in the use of antipsychotics, which increase significantly as HD progresses.

Meanwhile, people who develop the rare form of juvenile HD show different medication patterns altogether, often requiring more treatments for aggression and irritability rather than for movement symptoms.

These findings highlight the need for personalized treatment approaches that consider unique disease trajectories and needs of different patient groups, particularly for those with juvenile HD.

Antidepressant Use in People with Dementia

A second study steps back from HD specifically and looks at a broader question: Do antidepressants influence cognitive decline in people with dementia? Antidepressants are often prescribed for people with dementia to help manage the psychological symptoms that come with the disease, like anxiety and depression.

Using data from the Swedish Registry for Cognitive Dementia Disorders, researchers examined whether certain antidepressants might actually accelerate cognitive deterioration. And the findings are raising eyebrows.

Among people with dementia, those taking antidepressants—especially SSRIs—experienced faster cognitive decline. The effect was particularly pronounced in individuals with more severe dementia at the study's start.

However, it's critical to note that some other studies have shown conflicting results, which just goes to show how complex this issue is. These findings add layers of complexity for the decision-making process for doctors and patients around the use of these medications, particularly for the most vulnerable groups of people with severe dementia.

People with Huntington's disease take more medications as the disease progresses, with antidepressants among the most common. This underscores the importance of open conversations between families and doctors to adjust treatments as needed.

More Medicine, Faster Decline?

Interestingly, they also suggest there is a dose-response relationship—meaning that higher doses of SSRIs were linked to an even greater rate of cognitive decline.

Medications like sertraline, citalopram, and escitalopram—widely used SSRIs—were the most strongly associated with cognitive decline. This raises important questions: Are these medications helping more than they're harming? Should doctors rethink how and when they prescribe them to people with dementia?

Another intriguing twist? The study found that men experienced a steeper cognitive decline on antidepressants compared to women, despite the fact that women are more likely to be prescribed these medications. Additionally, people who were not taking anti-anxiety or sleep medications alongside their antidepressants showed a more pronounced decline. Could other medications be offering some kind of protective effect, or is this just a coincidence? The answers remain unclear, highlighting the limitations of this study and the need for further research.

Things to Keep In Mind

There are some critical caveats for the study that links accelerated dementia to antidepressant use that people need to keep in mind, because this study isn't a one-to-one comparator for people from HD families.

- First, **depression itself is associated with dementia and cognitive impairment** , so we can't really tease apart the chicken-and-egg problem here. The associations between antidepressant use and cognitive decline could be due to the underlying psychiatric condition rather than the drug itself. In other words, people may be prescribed antidepressants because their symptoms are worse or progressing more rapidly - the underlying cause of decline is the brain disease, not the drug. Although the researchers tried to account for this, it's not something we can entirely rule out.

- Second, **dementia severity could itself be contributing to cognitive decline** , making it difficult to conclusively say the results they saw were because of the antidepressants. The relationship between antidepressant use and dementia severity is complicated. From the Enroll-HD data described here, we know that treatment and medication use evolves as HD progresses, which should likely be the case for other diseases as well, like dementia.

- Third, **different forms of dementia have very different biological causes** , like Alzheimer's, Lewy body dementia, or frontotemporal dementia. But this study grouped these various types of dementia together. This could be masking some of the disease-specific effects that may be at play between the effects of antidepressants and these specific types of dementia. To add to this, HD is also a unique disease which likely has its own individual effects with specific medications. For that reason, it's important to assess medication effects at the individual disease and patient level, rather than drawing conclusions broadly across a group of diseases.

- Lastly, and perhaps most importantly, **this study looked at association, not causation**. These types of study designs that aren't testing medications in a blinded clinical trial have major limitations. They just don't have the power or rigor to draw black-and-white conclusions about what is happening biologically. However, they are good at making associations between events, like the use of antidepressants and cognitive decline, that can be examined in more detail in future studies.

Don’t Toss Your Meds!

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Both studies highlight the delicate balancing act of prescribing medications for neurodegenerative diseases based on the individual. For people with HD and other forms of dementia, medications can provide crucial relief from psychiatric and motor symptoms.

A critical takeaway is that these recent findings don’t mean antidepressants should be abandoned for HD! Rather, they underscore the need for a thoughtful, individualized approach through collaborative relationships between clinicians, patients, and caregivers. Often people close to us know us better than we know ourselves, and this is particularly true for caregivers.

For many people with HD, the short-term risk from depression or challenging behaviours is huge - these are symptoms that can all too easily lead to injury, self-harm, and premature death. Balancing short-term and long-term risks, and the potential harms and benefits from treatment options, is a delicate business demanding full engagement between patients, their loved ones, and medical professionals.

Conversations between HD families and doctors should be open and honest, so that clinicians can remain vigilant, adjusting treatment plans based on the latest research and the evolving needs of each patient. This could also include helping people find access to non-drug treatments, like therapy, support groups, and lifestyle changes.

The Road Ahead

The studies discussed here are a reminder that medicine is never one-size-fits-all. Particularly for HD, medication use is incredibly common and just gets more frequent and more complicated as the disease progresses. Treatment patterns can be so different for various groups, which really highlights the need for open and honest dialog between patients and doctors to develop personalized care plans.

This work also highlights how much we still have to learn about the brain and the interplay between medications and neurodegeneration. More research is needed to untangle these complex relationships, but one thing is clear: Whether in HD or broader dementia care, the goal remains the same—to create a smoother, safer journey for those navigating these difficult conditions.

For now, patients and families should stay informed, ask questions, and work closely with their doctors to ensure that treatments align with their individual needs. Because when it comes to the brain’s roadmap, careful navigation is key to getting where we want to go.

The authors have no conflicts of interest to declare.For more information about our disclosure policy see our FAQ...

GLOSSARY

frontotemporal dementia a degenerative brain disease that can cause problems with speech and behavior

neurodegenerative A disease caused by progressive malfunctioning and death of brain cells (neurons)

clinical trial Very carefully planned experiments designed to answer specific questions about how a drug affects human beings

observational A study in which measurements are made in human volunteers but no experimental drug or treatment is given

juvenile HD Huntington's disease where symptoms begin before the age of 20.