# Alzheimer's Disease: An Overview of the Disease, Early Signs, Advances in Research and the Importance of Patient Education

Alzheimer's disease is a progressive and irreversible neurological disorder that affects memory, cognitive function and behavior. It is the most common cause of dementia in older adults, and according to the Alzheimer's Association, it affects approximately 6.2 million Americans aged 65 and older.

## **Overview of Alzheimer's Disease**

The exact cause of Alzheimer's disease is still unknown, but researchers believe that it is caused by a combination of genetic, environmental and lifestyle factors. The disease is characterized by the buildup of two types of protein in the brain: amyloid beta and tau. These proteins cause damage to nerve cells and disrupt communication between brain cells, leading to the symptoms associated with Alzheimer's disease.

### Early Signs of Alzheimer's Disease

The early signs of Alzheimer's disease can be subtle and easily overlooked, but it is important to recognize them as early as possible to begin treatment and slow the progression of the disease. Some of the early signs include:

- Memory loss, particularly short-term memory loss
- Difficulty performing familiar tasks
- Challenges with problem-solving and decision-making
- Confusion about time and place
- Changes in mood and behavior
- Difficulty with language and communication

#### Advances in Research and Treatment

Advances in research have provided a better understanding of the underlying causes of Alzheimer's disease. Scientists have made significant progress in identifying genetic and environmental risk factors, as well as developing new tools for early diagnosis. One exciting area of research involves the use of biomarkers to detect Alzheimer's disease in its earliest stages. These biomarkers can identify changes in the brain before symptoms appear, allowing for earlier intervention and better outcomes.

While there is currently no cure for Alzheimer's disease, advances in research have led to new treatments and therapies that can help manage symptoms and slow the progression of the disease. Some of these advances include:

- Medications: Cholinesterase inhibitors and memantine are two medications commonly used to manage symptoms of Alzheimer's disease. They work by increasing the levels of neurotransmitters in the brain, which can improve cognitive function and memory.
- **Lifestyle changes:** Regular exercise, a healthy diet, and social engagement can all help reduce the risk of developing Alzheimer's disease and slow its progression in those who have already been diagnosed.
- **Clinical trials:** Researchers are constantly testing new medications and therapies for Alzheimer's disease through clinical trials. Participating in a clinical trial can provide access to cutting-edge treatments and contribute to the search for a cure.

#### The Importance of Patient Education

Patient education is a critical component of Alzheimer's disease management. It is important for patients and their families to understand the disease, its symptoms, and the available treatment options. Education can also help patients and families plan for the future and make informed decisions about care and support.

Additionally, patient education can help reduce the stigma and misinformation surrounding Alzheimer's disease. Many people still believe that Alzheimer's disease is a normal part of aging, or that it only affects memory. Educating the public can help break down these misconceptions and promote early diagnosis and treatment.

If you or a loved one are experiencing any of the early signs of Alzheimer's disease, or if you have concerns about your memory or cognitive function, don't hesitate to contact me at 321-285-2369. Early diagnosis and treatment can help slow the progression of the disease and improve quality of life. Additionally, consider participating in clinical trials or supporting organizations that fund research for Alzheimer's disease. Together, we can work towards a world without Alzheimer's disease.

#### About me

**<u>Rekha Gandhi, M.D.</u>** is a board-certified neurologist with 15 years of neurological experience and additional fellowship training in epilepsy disorders. In 2019, she founded Neurovations Clinic, which focuses on comprehensive care for patients across a wide spectrum of neurological disorders.

321.285.2369 | neurovationsclinic.com