Dementia is a term that encompasses a group of symptoms associated with a decline in brain function. In addition to Alzheimer’s disease (AD), common disorders claiming dementia as a symptom include Lewy body disease, multiple sclerosis, Parkinson’s disease, infections, tumors, and brain trauma. A single stroke or repeated small strokes can cause vascular dementia. Although older people are at higher risk for certain types of dementia, the condition is not a normal process of aging.

In the case of slow, progressive dementia, a relative or friend is often the first to notice changes in the patient’s mental abilities. Appropriate testing, including a physical examination and a mental-status examination, is performed before a diagnosis is made. Progressive dementia typically begins with memory problems, followed by thinking, judgment, personality, or behavior changes and speech difficulties. These problems worsen over time, and eventually the patient is unable to care for himself or herself.

Dementia treatment depends upon the cause. If dementia is reversible, as in the case of brain injury, infection, or tumor, the cause may be treatable. If it is progressive and irreversible, as with AD or Parkinson’s dementia, drug therapy is aimed at slowing symptom progression and improving existing quality of life. Medications also can help control depression and behavior problems. As dementia progresses, the patient often requires significant assistance with daily activities. Family members and friends may act as caregivers. In-home caregiving, nursing assistance, adult day care centers, and nursing homes and other residential facilities are care options for patients with dementia.
There Is No Cure, Although the Decline in Brain Function Can Be Slowed

Dementia is a term describing a group of symptoms associated with a decline in brain function. In dementia, nerve cells in the brain are damaged or for some reason cannot communicate with each other. Damage to the functioning of the brain may be reversible or permanent.

Dementia can affect a person’s ability to remember, think, speak, judge situations, and act appropriately. Depending upon the cause, dementia can appear suddenly or develop progressively over a period of months to years. The most common progressive dementia is Alzheimer’s disease (AD), occurring in 4 million U.S. patients. Dementia is not a normal part of aging, although most cases occur in older patients, especially those older than 85 years.

Types of Dementia
Most cases of dementia are irreversible, meaning that the brain changes are permanent. Over a period of 8 to 10 years, brain function in patients with AD gradually worsens as neurons and proteins in the brain tissue slowly deteriorate. Most patients with AD die within 10 to 20 years after diagnosis because of physical complications from the loss of bodily functions, such as swallowing.

Vascular dementia (VD), often a result of stroke, begins suddenly but may not worsen unless the patient suffers further strokes. VD has many causes, and its course and prognosis depend upon the initial cause.

Risk Factors and Symptoms
Factors that increase the risk of both AD and VD include older age, family history of dementia, diabetes, atherosclerosis and high cholesterol, smoking, and heavy alcohol use. Mild cognitive impairment, in which some memory and thinking skills are affected but not enough to be considered dementia, also places a person at higher risk for progressive dementia.

Symptoms vary according to the cause of dementia, as well as by the individual patient. A common pattern in progressive dementia is an initial problem with memory or minor personality changes. Dementia is diagnosed when a significant change has occurred in at least two brain functions (memory, language, thinking, perception, judgment, or reasoning). Diagnosis is made through a mental-status examination, a physical examination, and a history of relevant symptoms.

A person diagnosed with dementia should be advised to remain active and continue enjoyable activities. Regular physical exercise and intellectual stimulation should be encouraged. Regular vision and hearing checks are important, as is simplifying the home space and maintaining a daily schedule. Driving, cooking, and other activities requiring concentration, orientation, and quick reflexes should be continued only if they can be performed safely. Numerous national and local support groups exist for caregivers of patients with dementia. These groups offer valuable tips and coping strategies.

Treatment
Dementia has no cure, and there are no medications that can reverse the brain changes occurring in progressive dementias or VD. However, several drugs can temporarily slow brain-function decline in AD. Cholinesterase inhibitors (CIs) work by slowing the breakdown of acetylcholine, a brain chemical that helps memory and thinking activities of nerve cells. Another drug, memantine, stabilizes glutamate (another brain chemical that helps nerve cells involved with memory and learning). Because CIs and memantine each act on a different brain chemical, the two types of drugs may be used simultaneously for a stronger effect. Antipsychotics, antidepressants, sedatives, anticonvulsants, or stimulants may be used to treat concentration, sleep, and behavioral problems.