NEUROLOGY GROUP of BERGEN COUNTY

# Dementia

Dementia refers to a loss of cognitive function (cognition) due to changes in the brain caused by disease or trauma. The changes may occur gradually or quickly; and how they occur may determine whether dementia is reversible or irreversible.

Cognition is the act or process of thinking, perceiving, and learning. Cognitive functions that may be affected by dementia include the following:

- Memory
- Decision making
- Judgement
- Spatial orientation
- Thinking or reasoning
- Verbal communication

Dementia also may result in behavioral or personality changes, depending on the area(s) of the brain affected. Some dementia is reversible and can be treated or cured. The degree of reversibility often depends on how quickly the underlying cause is identified and treated. Irreversible dementia is caused by incurable conditions such as Alzheimer's disease. Patients with irreversible dementia may eventually become unable to care for themselves and may require around-the-clock care.

## Evaluation of Dementia:

The first step in evaluating someone with memory problems, behavioral/personality changes or other cognitive issues is to undergo a thorough medical and neurological evaluation. A qualified physician should gather a complete history from the patient and others, and then perform a detailed medical and neurological examination. Blood tests are generally done to look for potentially reversible causes of dementia. Imaging studies (CT scan or MRI) of the brain help to evaluate for a variety of different structural, vascular or inflammatory conditions that can cause dementia. An electroencephalogram (EEG) is often done to evaluate the status of the electrical activity in the brain and to look for possible seizures, which can cause many of the symptoms of dementia. Vascular studies (Carotid Ultrasound and Transcranial Doppler) can be helpful in assessing the flow of blood to the brain. Computerized cognitive testing is often done to determine the degree that different brain functions are affected, and gives a baseline that can easily be followed over time. By combining a detailed history, comprehensive examination and diagnostic tests, the physician can arrive at the best possible answer to explain the patient's symptoms.