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Final AD Essay

Alzheimer's disease (AD) is an irreversible, progressive brain disease that slowly destroys memory and thinking skills, and eventually, the ability to carry out the simplest tasks of daily living. AD begins slowly. At first, the only symptom may be mild forgetfulness, which can be confused with age-related memory change. In the early stage of AD, people may have trouble remembering recent events, activities, or the names of familiar people or things. People in the middle stages of AD may forget how to do simple tasks like brushing their teeth or combing their hair. They can no longer think clearly. They begin to have problems speaking, understanding, reading, or writing. An early, accurate diagnosis of AD helps patients and their families plan for the future. Early diagnosis will also offer the best chance to treat the symptoms of the disease. Today the only definite way to diagnose AD is to find out whether there are plaques and tangles in brain tissue. Plaques are deposits of the protein *beta-amyloid* that accumulate in the spaces between nerve cells and tangles are deposits of the protein *tau* that accumulate inside of nerve cells. Doctors usually must wait until they do an autopsy to look at brain tissue, which is an examination of the body after a person dies. Therefore, doctors can only make a diagnosis of "possible" or "probable" AD while the person is still alive. AD is one of the most common causes of dementia among older people. Dementia is a general term that refers to a decline in cognitive function so extensive that it interferes with daily life and activities. Dementia is not a disease itself, but a group of symptoms that often accompanies a disease or condition. Mild cognitive impairment (MCI) is a condition in which a person has memory problems greater than those expected for his or her age, but they do not have the personality changes or cognitive problems that characterize AD. No single treatment has been proven to stop AD. There are drugs available to help maintain mental function, manage behavioral symptoms, and slow down the progression of AD. People with AD will most likely have behavior changes. Some will get aggressive or anxious. Many misinterpret what they see or hear. It is important to understand that the person is not acting that way on purpose and you need to understand how to respond to the patient.

Glossary

- AD- Alzheimer's disease
- Alzheimer's disease- a common form of dementia of unknown cause, usually beginning in late middle age, characterized by memory lapses, confusion, emotional instability, and progressive loss of mental ability.
- MCI- Mild Cognitive Impairment
- Mild Cognitive Impairment- is a diagnosis given to individuals who have cognitive impairments beyond that expected for their age
- APOE-e4- the "risk gene"
- APOE- apolipo protein; AD makes one form of protein call APOE
- Dementia- severe impairment or loss of intellectual capacity and personality integration, due to the loss of or damage to neurons in the brain
- Plaques- deposits of the protein *beta-amyloid* that accumulate inside of nerve cells
- Tangles- deposits of the protein *tau* that accumulate inside of nerve cells