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ALZHEIMER'S DISEASE
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The incidence of Alzheimer's disease is one of the most actual problems in medicine all over the world. To date, a radical remedy has not yet been found. In 2015, there were approximately 48 million people worldwide with Alzheimer's disease. Furthermore, Alzheimer's disease is the leading cause of mental impairment in elderly people and accounts for a large percentage of admissions to assisted living homes, nursing homes, and other long-term care facilities. In 2010, dementia resulted in about 486,000 deaths.

The goal of this work is discovery of the etiology, pathogenesis and basic manifestations of Alzheimer's disease.

No known causes of the disease have been concretely linked to it yet. Besides, quite a lot of diseases have symptoms in common with the dementia associated with Alzheimer, making it even more complicated to establish a definitive cause to the disease. This is why when examining a patient, it is important to understand the different types of dementia-related illnesses, thus to establish the correct diagnosis. Genetic is believed to be responsible for 70% of the risk, with many genes usually involved. Other risk factors include a history of head injuries, depression, or hypertension.

However, some hypothesis may be formulated regarding the development of the disease. First is the cholinergic hypothesis: the oldest, which proposes that AD is caused by reduced synthesis of the neurotransmitter acetylcholine. The second is the amyloid hypothesis: which postulates that extracellular amyloid beta $A\beta$ deposits are the fundamental cause of the disease. Third, we have the Tau hypothesis: it proposes that tau protein abnormalities initiate the disease cascade. Finally, other hypotheses state that the poor functioning of blood-brain barrier may be involved.

Alzheimer's disease (AD) is a chronic neurodegenerative disease with a slow start and which gets worse with time. Its most common early symptom is short-term memory loss. As the disease advances, the patient's condition gets worse and more severe symptoms manifest, such as problems with language, disorientation (including easily getting lost), mood swings, loss of motivation, not managing self-care, and behavioural issues. As the patients' condition declines, they tend to isolate themselves from family and society. Death is then caused by gradual loss of bodily functions.

As for now, there are no treatment available to stop or reverse the disease's progression even though some may temporarily improve the symptoms. As a matter of fact, it is the case to many dementias similar to Alzheimer's. However, research is done every day and a lot of financial and intellectual means are involved in the process. This research covers a wide range of areas, from better diagnostic tools to genetic testing.

It is understood that Alzheimer's disease is a very progressive degenerative disease impacting not only the patient but immediate family members. Therefore, it is imperative that research should be continued until we reach a complete understanding of the etiology of the disease but also find a cure or significant prophylaxis.