A Study on Alzheimer’s Disease

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Abstract

Alzheimer’s disease is a prolonged neurologically degraded disease which gets exaggerated with the course of time. While in its progression, Alzheimer’s disease gives rise to memory shortfall and cognitive fall off. It is a constituent of two pathological conditions i.e. Neurofibrillary tangles, which are clusters formed by hyperphosphorylation of microtubule related protein are called Tau, and Senile plaque which contains β-Amyloid, a neurotoxin, which causes impairment of synaptic plasticity and may also change the functionality of many ionic channels. These two deadly proteins are the sure signs of Alzheimer’s disease and attack the Hippocampus region thereby starts damaging the hippocampal pyramidal neurons in its early stage.

According to the survey on Alzheimer’s disease, it is the 6th main cause of deaths in US and in upcoming years, this will become the 3rd main cause of deaths. But, despite researches, therapies and awareness, the actual cause of Alzheimer’s disease is still a big question mark. “What is the actual cause of it”? “When and how it gets accumulated on a neuron”? “How a person can know if he is infected with this disease”? These are some of the questions that are
yet to be answered.

In this paper, a detailed overview of the work done till now for the identification and treatment of Alzheimer’s disease is presented.

References

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Index Terms

Computer Science

Biomedical

Keywords

Alzheimer’s disease, neurofibrillary tangles, β-amyloid, tau protein