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Alzheimer's

What is Alzheimer’s disease? Alzheimer’s disease is a neurological condition that affects the brain, cognitive deficits, and behavioral changes. Some people may think that dementia and Alzheimer’s are the same disorder, but in reality, the disease begins as Alzheimer’s and ends in dementia. This disease typically affects elders in their mid 60’s, anyone that starts having symptoms before the age of 65 is considered to have early onset Alzheimer's. This disorder consists of 3 stages, early onset, middle stage, and late onset.

Some symptoms and signs to look out for with people with high risk of these Alzheimer's would include memory loss, planning or problem solving, difficulty completing a familiar task, confusion with time or place, trouble understanding visual images, misplacing items, poor judgment, withdrawal from work or socializing, and mood changes. Alzheimer's disease is said to start affecting the brain up to 10 years before any signs or symptoms are shown in a person. The higher at-risk people of getting Alzheimer's disease are known to be woman, woman are part of “one third of patients” get diagnosed with the disease as an article says. Females tend to be at higher risk as men since it is said that “woman live longer than men”, which come with some biological differences including hormonal differences, epigenetics, and frailty. Another article explains that “While men may have a higher risk of mild cognitive impairment (MCI), an intermediate stage between normal aging and dementia, women are disproportionally affected with AD”, which lets us know that men's Alzheimer's develops more rapidly than in woman.

A few things that may cause this disease are lifestyle, drugs, health issues, and genetic. It is said to be in 3 genes “presenilin 1, amyloid precursor protein, and presenilin 2.” Presenilin 1 plays an important role in generation of amyloid beta from amyloid-beta precursor protein. Presenilin 2 is the gene that accounts for less than 5 percent of all early-onset cases of the disorder. Amyloid precursor protein is a single-pass transmembrane protein expressed at high levels in the brain. Drugs may have an impact of causing Alzheimer’s, but not one drug has been singled out to just cause Alzheimer's. The thing that causes them to be a part of the causes is overtime use, but the two that have the greatest link to it would be anticholinergics and benzodiazepines. Anticholinergics and benzodiazepines are drugs that affect the activity of neurotransmitters, anticholinergics blocks the action of acetylcholine and benzodiazepines are depressants that produce sedation and hypnosis, relieve anxiety and muscle spasms, and reduce seizures.

Although there are many causes, there are also a few things that can reduce the chances of getting Alzheimer’s but there is currently no cure. In an article they explain that “B cells in the brain are thought to spread the disease, and blocking the generation of these peptides may be part of useful treatments.” which they are currently treating the disease based on cholinesterase inhibitors and a glutamate antagonist. Another thing that scientists have studied are vitamins, vitamin B, E, and C. The results they gathered included “a two-year treatment with homocysteine and vitamin B in 271 patients indicated a significant difference compared to placebo in whole brain atrophy,” which is better than not having any change in results from the vitamin to the placebo.

The stage of Alzheimer’s disease in which you are diagnosed in is something very important to be able to start getting support, early-stage Alzheimer is the first type which people

are still able to function by themselves. In this stage, people experience the most memory loss and they may feel like they are experiencing memory lapses. In the middle stage, is when patients start to have damage occur in areas of the brain that controls language, reasoning, sensory processing, and conscious thoughts. This is the stage where the patience is required to have caretaker or family members take care of them full time, or at least be more aware of drastic changes to make sure they don't put their own life at risk or of others. The last stage of Alzheimer's is when patients are classified as having dementia. At this point, the brain tissue shrinks significantly and mainly affects communication and is completely dependent on others. Once they have reached this stage, the patient may be in bed most of the time and their body starts to slowly shut down, at this point doctors recommend families to give them the best care that they can to make sure they are comfortable before things happen.

In conclusion, we know the difference between Alzheimer's and dementia. There are 3 stages that indicate what type of treatment or help you may need, there is no cure but there are treatments you are able to receive. Alzheimer's symptoms are silent, which makes it more difficult for people to start seeking help.

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