Does Brain Region Volume Change in Patients with Dementia?

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Dementia is a disease that impairs the brain it causes memory loss and interferes with a person’s ability to think and make judgments. Every year 10 million people get diagnosed with dementia. The hypothesis is that dementia could change brain region volume, and this could be used to diagnose dementia using an MRI scan. To get the results data was collected of a control group of people who don’t have dementia and a group of people who do have dementia, then data of their MRI scan was obtained from an existing database (https://central.xnat.org/)of each region. After that to get a conclusive answer the average, significant difference, and a t-test was calculated. The results showed that there were differences in brain region volume and a significant decrease in the hippocampus, amygdala, and thalamus, and a significant increase in the ventricle. discussed the results of taking different age groups into consideration. This could help diagnose people with dementia using MRI scans.

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