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**Research Article** 

# A RETROSPECTIVE INVESTIGATION OF A COHORT OF OUTPATIENTS WITH ALZHEIMER'S DISEASE FOUND THAT THEY HAD SEIZURES

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## ABSTRACT

There are no previous studies that examined the frequency of seizures in Alzheimer's disease in outpatients, according to our information. The clinical records of all patients sent to our university hospital in Rome's cognitive function clinic. All records contain information from medical and neurological diagnostic work performed by neurologists who specialize in psychiatric disorders. We looked at the number of years since the onset of symptoms, the severity of the disease in entry, and risk factors for metabolic and cardiovascular risk factors such as diabetes, hyperlipidemia, and high blood pressure to see if there are any risks. which could be, early features of epilepsy. Fainting was three times more common in men than in women. 13 of the 145 Alzheimer's patients whose records we looked at experienced partial seizures that were usually second to none, and one case had a common seizure, according to the data. Fainting was not pronounced in all cases. A total of 9.7% of epileptic seizures were detected in this retrospective study, a record-based study of Alzheimer's patients who visited a psychiatric clinic between 2015 and 2016. Fainting was more common in men than women in this study. As part of our research to find out whether anti-depressant or anti-depressant drugs play a role in reducing falls, we found that, despite the fact that most of our Alzheimer's Disease patients were taking psychotropic drugs that could cause epilepsy, we found nothing. the link between taking these drugs and the onset of seizures.

Key words: - Metabolic, seizures, Alzheimer's.

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## INTRODUCTION

Dementia is a major risk factor for fainting in the elderly. Epilepsy can play a role in the progression of Alzheimer's disease, and the diagnosis of seizures is important to predict outcome and avoid seizures - related problems. Cases with Alzheimer's disease are 6-10 times more likely to experience seizures than adults of the same age. [1]

\*Corresponding Author Dr. G. Arudhra, Asst. Professor, Department of Psychiatry, Sri Lakshmi Narayana Institute of Medical Sciences, Pondicherry, India Email: - thara.biotech@gmail.com There are no previous studies that examined the frequency of seizures in Alzheimer's disease in outpatients, according to our information. In addition, there is a lack of data on cardiovascular events, as well as drugs, which may be clinical features of fainting in people with Alzheimer's disease. The aim of this retrospective study was to detect frequent seizures in outpatients visiting our psychiatric clinic at our university hospital, and to identify the risk factors for the first seizures. [2] We did this by reviewing our patients' medical records and collecting information about their age, education, dementia and gender. We were

particularly interested in determining the impact of potentially treatable cardiovascular variables, as well as antipsychotic and antidepressant medicines, on epileptic seizures.

## **Cohort Population**

Examining [3] health records of all cases referred to the psychiatric clinic. All records contain information from medical and neurological diagnostic work performed by neurologists who specialize in psychiatric disorders. [4] Laboratory tests, axial computerized tomography scanning, or nuclear magnetic resonance imaging of the brain were all part of the test. The Mini Mental State Examination, [5] Clinical Dementia Scale and the full battery of neuropsychology were all used to collect psychiatric and functional data. Associated medical conditions such as diabetes, high blood pressure, and hyperlipidemia were also considered in the records. All cases with diabetes have received orally antidiabetic treatment, according to reports.

Antihypertensive medicines were administered to hypertension individuals to keep their systolic and diastolic blood pressures below 140/80 mmHg. [6] Statins were prescribed to cases with hyperlipidemia (> 240 mg/L). Information about given neurological therapy was included in the clinical data.

According to a study, 245 (42 percent) of the 583 new cases assessed had dementia, 105 (18 percent) had "moderate cognitive impairment," and 235 (40 percent) had no symptoms of cognitive impairment. Our study found that 145 (59%) of the 245 demented cases met the criteria for Alzheimer's disease, 47 (19%) for vascular dementia, and 53 (22%) for other kinds of dementia. [7]

## AIMS AND OBJECTIVES:

This study is to evaluate outpatients with alzheimer's disease found that they had seizures.

## Methods:

We looked at the number of years from the onset of cognitive symptoms, difficulty in entry, and risk metabolic and cardiovascular risk factors such as diabetes, hyperlipidemia, and high blood pressure to detect that there were any potential risk factors for the onset of epilepsy. We looked at CT brain scans and MRI and classified them as normal, atrophy, lacunar or multiinfarct encephalopathy, or both. Anticholinesterase inhibitors and memantine, antidepressants and antidepressants were all used on the last visit. All the information was collected by neuroscientists with dementia and reviewed by a doctor from our fall department of our department. The International League Against Epilepsy's Commission on Classification and Terminology was used to diagnose seizures. To rule out symptomatic seizures, cases with seizures had complete hematological screening, EEG recording, and MRI or CT brain scans.

## Analytical statistics

All data in the text are expressed as mean SD unless otherwise stated. Statistical significance was defined as a P-value of less than or equal to 0.05. For categorical variables, odds ratios and relative 95 percent confidence intervals were calculated.

## Results

Our research found 14 people (9.7%) having seizures in a cohort of 145 cases with Alzheimer's disease. Fainting was 3 times more common in men than in women (Table 1). Thirteen of the 145 Alzheimer's patients whose records we looked at had partial seizures, and one patient had a common seizure, according to the data. Fainting was not pronounced in all cases. Early autoimmune symptoms in many cases with partial complications include paralysis of the head or oral automatisms, loss of consciousness, and tonic-clonic seizures, according to the report. After the experience, all cases reported being puzzled for a long time. Ten of the 14 cases who had seizures (71.4%) had two or more incidents, according to their accounts. There was no indication of a family history of epilepsy or a history of seizures prior to the development of psychiatric disorders in any of the literature. The median time between the diagnosis of our Alzheimer's disease and the reported seizure was 3.6 1.6 years. Antiepileptic drugs were given to all people who were unconscious.

Between groups with or without seizures, no differences in age, education, or duration of the disease were found [table 1].

Although the number of unconscious cases was almost double in the group with severe dementia as in other groups (28.6 percent vs 15.3 percent), no link was established between the onset of seizures and severity of dementia (table 1).

Despite the fact that there was no link between high blood pressure and dyslipidemia in the study of cardiovascular risk factors, the prevalence of hypertensive cases in the group without fainting was almost double that of the unconscious group (47.3 percent vs 28.6 percent). In contrast, the prevalence of dyslipidemia cases in the group of unconscious cases was almost double that of the untreated group of cases (21 percent).

## TABLE 1: PATIENT DEMOGRAPHICS WITH AND WITHOUT SEIZUES.

| <b>RISK FACTORS</b> | PATIENTS WITH<br>SEIZURES | PATIENTS WITHOUT<br>SEIZURES | P VALUE |
|---------------------|---------------------------|------------------------------|---------|
| SEX M/F             | 9/5                       | 47/84                        | 3.22    |

| AGE              | 77.9 | 77.8   | NS   |
|------------------|------|--------|------|
| EDUCATION        | 8.3  | 6.6    | NS   |
| DISEASE DURATION | 5.8  | 5.3    | NS   |
| CLINICAL         | 4/10 | 20/111 | 2.2  |
| DEMENTIA         |      |        |      |
| HTN              | 4/10 | 62/69  | 0.4  |
| DM               | 0/14 | 34/97  | 0.03 |
| DISLIPIDEMIA     | 3/11 | 17/114 | 1.82 |
| NEUROIMAGING     |      |        |      |
| FINDINGS         |      |        |      |
| NORMAL           | 1    | 9      | NS   |
| ATROPHY          | 5    | 41     |      |
| VASCULAR LESIONS | 1    | 12     |      |
| ATROPHY          | 7    | 69     |      |
| +VASCULAR        |      |        |      |
| LESIONS          |      |        |      |
| ANTIDEMENTIA     |      |        |      |
| THERAPY          |      |        |      |
| NO THERAPY       | 0    | 2      | NS   |
| MEMANTINE        | 0    | 9      |      |
| ACHE -I          | 13   | 111    |      |
| ВОТН             | 1    | 9      |      |
| ANTIDEPRESSANT   |      |        |      |
| THERAPY          |      |        |      |
| SSRIS            | 6    | 81     | NS   |
| SNRIS            | 0    | 7      |      |
| NO THERAPY       | 8    | 43     |      |

## DISCUSSION

A total of 9.7% of epileptic seizures were detected in this retrospective study, a record-based study of Alzheimer's patients who visited a psychiatric clinic between 2015 and 2016. Fainting was more common in men than women in this study population. In subjects with moderate Alzheimer's Disease, the frequency of seizures recorded in this group falls within the range of moderate Alzheimer's Disease subjects. Due to differences in study subjects, published data raise the prevalence of seizures in cases with Alzheimer's Disease.

A study had showed increased intensity and duration of symptoms, younger age, and lower education as risk factors for fainting in most people [8]. We did not find a link between fainting and education, age, or duration of symptoms in people with Alzheimer's disease when looking at potential risk factors. An interesting finding, however, was that double-blind Alzheimer's Disease cases had worse depression than those who did not, despite the fact that the difference in severity of depression between the two groups failed to achieve statistical significance [9]. A researcher found that, 11% incidence of seizures in cases with the first 10 years of the disease and 26% more frequently after 15 years of illness in people living at home. Abduction was found to occur at 23 percent of the time in a community-based case study for adults with severe disabilities; One in 4 cases with severe dementia developed seizures.

The motor generalised seizures developed in 11 percent of cases during the advanced stages of illness has been described in a study.

Researcher noted that the increase in the incidence of epilepsy was not limited to Alzheimer's Disease in the study of dementia and randomized seizures of adults in the local population. This study suggests that any condition of the disease that is severe enough to cause mental retardation may be associated with an increased risk of fainting [10].

In non-Alzheimer's Disease patients with dementia, the study found an eightfold increase in seizures. When we looked at other factors that could improve the chances of fainting, we found that people with disabilities were at greater risk of fainting. Although this finding is difficult to explain, especially in view of the small number of Alzheimer's Disease patients who have ever fainted in our study, one study found that men were 36 percent more likely to faint and 64 percent more likely to faint in men with Alzheimer's Disease, suggesting that men have an increased sexual risk of fainting. When we reviewed our data to determine the effect of potentially fatal cardiovascular risk factors, we found that the frequency of fainting was twice as high in people with hyperlipidemia as in those without hyperlipidemia. Although the differences between the groups failed to achieve statistical significance, the group suffering from fainting was nearly half the number of cases with high blood pressure as the epilepsy group. We believe that this is an interesting outcome that warrants additional examination using studies that are similarly intended to take into consideration antihypertensive medicine, despite the retrospective nature of our study and the small study group [11]. One surprising discovery was that none of the cases in the seizure group had diabetes, which was a surprise to the researchers. Although it is difficult to explain, we believe that the vascular encephalopathy that occurs after a diabetic insult is mostly subcortical in nature and is not always associated with epileptogenic.

#### CONCLUSION

As part of our research to find out whether antidepressant or anti-depressant drugs play a role in reducing falls, we found that, despite the fact that most of our Alzheimer's Disease patients were taking psychotropic drugs that could cause seizures, we found nothing. the link between taking these drugs and the onset of fainting. This was probably because cases were taking new-generation drugs in low doses. We also did not find any link between antidepressant use and seizures.

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