

## ASSOCIATION BETWEEN MIGRAINE HEADACHES AND DEMENTIA IN MORE THAN 7,400 PATIENTS FOLLOWED IN GENERAL PRACTICES IN THE UNITED KINGDOM

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### BACKGROUND:

Most previous studies focusing on the migraine headache-dementia relationship have failed to simultaneously adjust for several common comorbidities.

### OBJECTIVE:

The goal of this retrospective cohort study was to investigate the association between migraine headaches and dementia in general practices in the UK.

### METHODS:

The current study sample included patients who received a migraine diagnosis in one of 67 general practices in the UK between January 1997 and December 2016 (index date). Patients without migraine diagnoses were matched 1:1 to patients with migraine diagnoses based on propensity scores using a greedy algorithm and derived from the logistic regression using age, sex, index year, and co-diagnoses. The main outcome of the study was the association between migraine headaches and the incidence of dementia within 10 years of the index date.

### RESULTS:

This study included 7,454 individuals with or without migraine diagnoses. Mean age was 67.7 years (SD=5.8 years), and 72.9% of patients were women. Within 10 years of the index date, 5.2% of participants with and 3.7% of those without migraine headaches were diagnosed with dementia (log-rank  $p < 0.001$ ). The respective figures were 5.8% and 3.6% in women (log-rank  $p < 0.001$ ) and 4.5% and 3.4% in men (log-rank  $p = 0.722$ ). We observed a positive association between migraine diagnoses and all-cause dementia (hazard-ratio [HR]=1.43) as well as Alzheimer's disease (HR=1.87). Sensitivity analyses further revealed that these associations were only significant in women (all-cause dementia: HR=1.65; Alzheimer's disease: HR=2.27).

### CONCLUSIONS:

Migraine diagnoses were positively associated with all-cause dementia and Alzheimer's disease in women.

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If you would like to read any of the studies in its entirety, please, contact us to obtain the full version of a publication. Also, our research director is at your disposal if you have any further questions.

Thank you for your interest!