

UC Irvine

UC Irvine Previously Published Works

Title

A prospective study of the use of calcium channel blockers and the risk of developing Alzheimer's disease in the Baltimore Longitudinal Study of Aging (BLSA)

Permalink

<https://escholarship.org/uc/item/6sw8k5vw>

Journal

JOURNAL OF THE AMERICAN GERIATRICS SOCIETY, 48(8)

ISSN

0002-8614

Authors

Yasar, S

Corrada, M

Kawas, C

Publication Date

2000-08-01

DOI

10.1111/j.1532-5415.2000.tb06881.x

Copyright Information

This work is made available under the terms of a Creative Commons Attribution License, available at <https://creativecommons.org/licenses/by/4.0/>

Peer reviewed

POSTER ABSTRACTS

P393

A PROSPECTIVE STUDY OF THE USE OF CALCIUM CHANNEL BLOCKERS AND THE RISK OF DEVELOPING ALZHEIMER'S DISEASE IN THE BALTIMORE LONGITUDINAL STUDY OF AGING (BLSA)

Sevil Yasar, Johns Hopkins University, Baltimore, MD USA; **Maria Corrada**, Johns Hopkins University, Baltimore, MD USA; **Claudia Kawas**, Johns Hopkins University, Baltimore, Maryland United States

S Yasar, MD 1, **M Corrada**, ScM 2, **C Kawas**, MD 2-3*; 1 Division of Geriatric Medicine, Johns Hopkins University, 2 Dept of Neurology, Johns Hopkins University, 3 Guest Researcher, Laboratory of Personality & Cognition, Baltimore Longitudinal Study of Aging/NIH/NIH

Introduction: Calcium homeostasis changes are associated with brain aging. Cytotoxic events produce elevated intracellular calcium via numerous mechanisms, such as changes in calcium channels. Several clinical trials have explored a possible therapeutic role of calcium channel blockers (CCB) in Alzheimer's Disease (AD). We studied possible preventive effects of CCB in development of AD in a prospective longitudinal study. **Methods:** In the first analysis, all active subjects between 1980-96 from the BLSA were included. During follow up, 108 of the subjects were diagnosed with AD. Since newer CCB, which are likely to pass the blood brain barrier were introduced in the late 80s, we performed a 2nd analysis that was restricted to the 1087 subjects who were active during 1990-96. During follow up, 59 of these subjects were diagnosed with AD. Data on use of CCB was obtained prospectively by self-report at each BLSA visit. Cox proportional hazards models were used to estimate the risk of developing AD associated with use of CCB. **Results/Conclusion:** In both analyses the use of CCB did not result in a significantly lower risk of AD (analysis 1: RR=0.96; p=.91; analysis 2: RR=0.56; p=.23 respectively), although there was a non-significant trend for decreased relative risk in the 2nd analysis. Follow up studies are needed with more detailed analysis of type of CCB used and/or length of usage.