cognitive impairment (MCI) or dementia. Less is known about the degree to which depression predicts cognitive decline in older adults who do not necessarily meet criteria for MCI. **Methods:** Subjects were 444 women age 60+ and cognitively intact at baseline, recruited from a single site of the Women's Health Initiative. Cognitive testing was performed at 2 time points, 3 years apart, with 13 tests of a variety of cognitive domains, yielding 17 cognitive test scores (5 from memory tests). A global Z-score was created for both baseline and 3-year time points by averaging all Z-scores for each study participant, at each time point. A similar procedure was done separately for memory scores. Cognitive change was defined as the difference between follow-up and baseline Z-score for global function and memory, respectively. Scores from the Geriatric Depression Scale (GDS), administered at baseline, were categorized as 0-2, 3-5, 6-9, and 10+ points. Linear regression models were run to determine extent to which GDS score predicted global cognitive or memory change over 3 years, adjusting for age, education, reading ability, ApoE e4 allele, and baseline cognitive z-score. **Results:** GDS score was a significant predictor of decline in both global and memory z-scores. Women with GDS score of 0-2 had a mean decline of 0.083 (global) and 0.088 (memory) standard deviations, while those with GDS score of 10+ had a mean decline of 0.262 SD for global (p=.004 for difference between means) and 0.290 SD for memory (p=.038 for difference between means). Those with GDS scores of 6-9 showed mean cognitive decline of 0.160 (Global, p=.08) and 0.203 (memory, p=.09). **Conclusions:** Women with GDS scores of 10 or greater at baseline had significantly greater 3-year decline in both memory and global cognitive function, compared to those with baseline GDS scores of 0-2. The mean degree of excess decline was 0.202 SD for memory and 0.178 SD for global cognitive function. Future studies are needed to determine potential mechanisms and mediating factors for this association.

P3-121 LONGITUDINAL STUDY ON PLASMA AMYLOID BETA (Aβ) 42 AND LATE-ONSET DEPRESSION: CONCEPT OF AMYLOID-ASSOCIATED DEPRESSION WEAKENED

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Background: Depression is a risk factor for Alzheimer's disease (AD) and high levels of plasma Amyloid beta 42 (Aβ42) were found in prestages of AD but also in depressed patients in cross-sectional studies. **Methods:** The data-set origins from prospective, population based ''Vienna Transdanube Aging study'' (VITA). **Results:** We focused on emerging LOD and selected the subpopulation of never depressed and not demented persons from the baseline. Higher plasma Aβ42 at baseline was a positive predictor (p<.05) of the first episode of LOD (major or minor depression) at 5 years. Without regarding persons with mild cognitive impairment (MCI), higher plasma Aβ42 at baseline was also a significant predictor for the development of probable or possible AD (p=.02). Higher conversion to AD was also associated with male gender and in trend with higher scores on the Geriatric Depression Scale, with stroke or cerebral infarction and apolipoprotein E ϵ4 allele. In a second approach, the presence of depression at baseline in the group of cognitively healthy persons (excluding MCI-cases) predicted the conversion to AD at 5 years (p<.05, OR=1.7). Highest tertile of plasma Aβ42 was associated in a trend with prediction of AD. However, in both investigates models, no association was found for an interaction between plasma Aβ42 and depression neither as category nor as continuous variable (short geriatric depression scale). **Conclusions:** These results argue against the concept of amyloid associated depression and plasma Aβ42 and depression seem independently associated with conversion to AD.

P3-122 HIGH PLASMA Aβ40 LEVELS ARE ASSOCIATED WITH INCIDENT COGNITIVE IMPAIRMENT NOT DEMENTED (CIND) AND DEMENTIA CASES IN PERSONS OF MEXICAN ANCESTRY (SALSA STUDY)

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Background: Plasma Aβ40 and Aβ42 are potential biomarkers for prediction of cognitive impairment and dementia. These biomarkers have not been studied in persons of Mexican ancestry. We study the association of plasma Aβ40 and Aβ42 levels with incidence of CIND and Dementia, and with cognitive measures among controls. **Methods:** Normal controls were matched to incident dementia/CIND cases by age at diagnosis (+/- 2 years) in a 1:3, 1:2 or 1:1 ratio. We selected 213 cases and 383 controls who had a plasma sample prior to diagnosis, at a mean of 1.9 years prior to diagnosis. Using well established sandwich ELISAs, we measured Aβ40 with antibodies BNT77/BA27 and Aβ42 using BNT77/BC-05. Conditional logistic regression adjusting for APOE4 and time between sample and diagnosis was used for association of Aβ measures with incidence of dementia/CIND. In the controls we used linear regression adjusting for age and education to assess association of Aβ levels with scores on the Modified Mini Mental Status Exam (3MS) and Spanish English Verbal Learning Test (SEVLT) recall measure. **Results:** A two-fold increase in Aβ40 was associated with an odds ratio for incidence of dementia/CIND of 2.14 (95% CI 1.26-3.64); further an Aβ40 in the highest quartile as compared to the lowest quartile was associated with an odds ratio for incidence of dementia/CIND of 2.02 (95% CI 1.16-3.55). There was no association of Aβ42 or the ratio, Aβ42/Aβ40, with this outcome . In controls, there was evidence of an association of high Aβ40 with increased errors on the 3MSE (p=0.08) and lower delayed recall scores on the SEVLT (p=0.048), after correcting for age and education. There was no association between cognitive scores and either Aβ42 or the ratio. **Conclusions:** In persons of Mexican ancestry a high plasma Aβ40 measured prior to diagnosis is associated with incident dementia/CIND cases. This finding has also been reported in Caucasian and African American population. Plasma Aβ40 may be a useful biomarker across populations heralding onset of cognitive decline.

P3-123 SPOUSAL DEMENTIA CAREGIVING AS A RISK FACTOR FOR INCIDENT DEMENTIA

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Background: Chronic psychosocial stressors have been shown to increase risk in caregivers for adverse health outcomes including depression, anxiety, and cognitive decline. Few studies have examined the long-term effects on incident dementia risk of spousal dementia caregiving. **Methods:** The Cache County Study of Memory, Health and Aging is a population-based cohort study that enrolled 5092 persons age 65 and older, examined in 1995 and in three subsequent triennial waves. Dementia diagnoses were rendered by an expert panel, after multi-stage standardized dementia ascertainment protocol with onset defined as age when index subject or spouse unambiguously met DMS-III-R criteria. After removal of prevalent dementia cases, there were 1,221 couples, or 2,442 subjects. Incident dementia or right-censoring was documented for both subject and spouse. Effect of spouse's incident dementia onset on subject's incident dementia hazard rate was tested using Cox proportional hazards models. The key independent variable is a time-varying covariate indicating the time at which the subject assumed a caregiver role for a spouse with dementia. Additional covariates included age, gender, APOE genotype, and (to control for shared socioeconomic status that may impact