P2-518 PROGRESSION TO DEGENERATIVE DEMENTIA IN MILD COGNITIVE IMPAIRMENT PATIENTS: A COHORT STUDY

Carolina Feldberg[1,2,3], Dorina Stefani[4], María Florencia Tartaglini[5], Paula Daniela Hermida[6], Diego Caruso[7], **Maria Veronica Somale**[8], Ricardo Allegri[9], [1]Ineba, Buenos Aires, Argentina; [2]INEBA, Buenos Aires, Argentina; [3]UBA, Buenos Aires, Argentina; [4]Instituto de Investigaciones Cardiológicas (ININCA-UBA-CONICET), Buenos Aires, Argentina; [5]Instituto de Neurociencias Buenos Aires (INEBA-CONICET), Argentina, Ciudad Autónoma de Buenos Aires, Argentina; [6]Instituto de Investigaciones Cardiológicas (ININCA-UBA-CONICET), CABA, Argentina; [7]Unidad Asistencial Dr. Cesar Milstein, CABA, Argentina; [8]INEBA, Buenos Aires, Argentina; [9]FLENI, Buenos Aires, Argentina. Contact e-mail: mvsomale@gmail.com

Background: Mild cognitive impairment (MCI) is a clinical entity conceptualized as a transitional zone between normal aging and dementia. Socio-demographic and genetic factors have been involved in the development of cognitive impairment and its progression to dementia. The aim of the present study is to describe the rate of conversion to dementia in a cohort of patients with mild cognitive impairment. **Methods:** Design Prospective cohort. Setting: A cohort of subjects with MCI was assessed and followed for three years (2013-2015) in a private institution dedicated to neurology. Participants: Patients with cognitive complaints over 60 years old who consulted spontaneously and met the MCI criteria without commitment in activities of daily living, were included consecutively and followed up annually for 3 years. Variables: Dementia and MCI were defined according to DSM IV criteria. Statistical methods we describe conversion rate as a proportion whit confidence interval (CI) 95%. Bivariate analysis was performed between dementia and sociodemographic predictors and Odds Ratio and CI was calculated. **Results:** We include 82 subjects with MCI (age: 76.6±6.9 years, 67% women, education: 11.5±3.7 years) 4 participants were lost to follow-up. The conversion rate to dementia was 14.1% (CI95% 7.7 to 23.2) In the bivariate analysis we compared the median baseline IQ of the patients who developed dementia (97; IQR 89-103) and those who did not (93; IQR 85-95) and we obtained a significant difference with a p = 0.040. **Conclusions:** The conversion rate to dementia in this Latin American population is coincident with studies conducted in other populations. A larger sample size is required to establish the possible predictors of conversion to dementia.

P2-519 "DUAL DECLINE" IN OLDER ADULTS AND RISK FOR MORTALITY: RESULTS FROM THE HEALTH ABC STUDY

Elizabeth P. Handing, Kathleen M. Hayden, Xiaoyan Iris Leng, Stephen B. Kritchevsky, Wake Forest School of Medicine, Winston-Salem, NC, USA. Contact e-mail: ehanding@wakehealth.edu

Background: Good cognitive and physical function are central to living a long and purposeful life. With increasing age, adults often experience cognitive decline and mobility impairments. Declines in either are associated with increased mortality. However, they are typically studied as independent entities. Few longitudinal studies have specifically examined "dual decline": the concomitant decline in physical and cognitive function and its association to mortality. **Methods:** Utilizing data from the Health, Aging, and Body Composition Study (Health ABC), we included 2,253 adults age 70-79 at baseline and calculated four mutually exclusive trajectories of decline (no decline (n= 1190), cognitive decline (n=445), physical decline (n=407), and dual decline (n=211)) based on repeated measures of cognition (Modified Mini-Mental State Exam: (3MS)) and physical function (Short Physical Performance Battery (SPPB)) across 5 years. These categories were then prospectively used to examine time to death over the subsequent 10 years. **Results:** Results from Cox regression models adjusted for age, sex, education, BMI, site, smoking, diabetes, and hypertension showed that cognitive decline (Hazard Ratio (HR): 1.45 [95% Confidence Interval [1.24-1.69]) and physical decline (HR: 1.57 [1.34-1.83]) were significantly associated with mortality compared to the control group (no decline). Dual decline was associated with nearly a 2-fold higher risk (HR: 2.48 [2.05-2.99]) compared to the control group. Compared to the no decline group, the median survival times for cognitive and physical decline were 1.3 and 1.6 years shorter, respectively, while the dual decline group was 4.3 years shorter. **Conclusions:** Future studies examining cognitive decline OR physical decline should include individuals with dual decline as this group may represent an especially vulnerable population. Risk factors for each type of decline are being investigated and may offer insights into the mechanisms underlying dual decline. Declines in the last decade of life may be modifiable and future studies should focus on preserving both physical and cognitive function in older adults.

P2-520 PREVALENCE OF LACK OF INTEREST AND ANHEDONIA IN THE GENERAL POPULATION OF THE UK BIOBANK

Valeria Manera[1], **Radia Zeghari**[2], Luigi Antelmi[3], [1]CoBTeK "Cognition Behaviour Technology," Cote d'Azur University, Nice, France; [2]CobTEk Université Nice Sophia Antipolis, Nice, France; [3]Université Cote d'Azur, INRIA-Epione Team, Sophia Antipolis, France. Contact e-mail: radia.zeghari@gmail.com

Background: Apathy (often manifested as a lack of interest) and anhedonia are very common behavioral and psychological symptoms across brain disorders. Despite mainly common in presence of pathological conditions, such as neurodegenerative disorders, apathy and anhedonia can also be present to varying degrees in healthy people (Ang et al., 2017). While the prevalence, the demographics, and the clinical features of lack of interest and anhedonia in several clinical populations start to be better understood, a comprehensive description of apathy in the general population is still lacking. **Methods:** In this presentation we will first explore whether it is meaningful to employ the UK Biobank self-report questions on disinterest to assess apathy and anhedonia, thanks to opinions gathered from experts in the field employing a Delphi panel methodology. Second, we will present the prevalence and distribution of apathy and anhedonia in the UK Biobank, a cohort which comprises more than 500,000 individuals aged 40–69 years recruited from the general population in the United Kingdom. **Results:** Despite some limitations, the expert panel suggested that one UKBiobank item on loss of interest (n. 2060) can be used as a candidate proxy for apathy and anhedonia. Converging with previous reports, it was found than 2.1% of the healthy subjects in the UKBiobank reported the presence of a lack of interest and pleasure