Myung-Sun Kim, Jiyeon Yoo

Objective: Alcohol affects functions of prefrontal and temporal cortices, and alcohol use disorder and binge drinking share structural/functional abnormalities and cognitive deficits. This study investigated the neuropsychological profile of college students with binge drinking.

Participants and Methods: *Participants:* Based on the scores of Alcohol Use Disorder Identification Test (AUDIT) and Alcohol Use Questionnaire (AUQ), binge-drinking (n>=32, male: 8, female: 24) and control (n=32, male: 8, female: 24) groups were determined. *Neuropsychological tests*: The Rey-Osterrieth Complex Test (RCFT), California Verbal Learning Test (CVLT), Wisconsin Card Sorting Test and Stroop Test were administered to evaluate nonverbal memory, verbal memory, executive function and attention, respectively.

Statistical analysis: Scores of the AUDIT and AUQ were analyzed by one-way ANOVA, and the performances on the neuropsychological tests were analyzed by multivariate ANOVA.

Results: The binge-drinking and control groups differed on AUDIT ($F(1,63) = 538.29$, $p < .001$) and AUQ ($F(1,63) = 97.34$, $p < .001$), with binge-drinking group obtaining significantly higher scores compared to the control group. The two groups differed on the copy ($F(1,62) = 6.05$, $p < .05$), immediate recall ($F(1,62) = 11.68$, $p <.01$) and delayed recall ($F(1,62) = 11.87$, $p <.01$) of the RCFT, and the long-term free recall of the CVLT ($F(1,62) = 13.37$, $p < .01$). The binge-drinking group exhibited significantly lower scores than did control group.

Conclusions: College students with binge drinking showed difficulties with verbal and nonverbal memory, and the present results indicate that excessive drinking could affect memory even when drinking history is relatively short.

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Measuring illness insight in patients with alcohol-related cognitive dysfunctions using the Q8 questionnaire: A validation study

Serge Walvoort, Paul Van der Heijden, Roy Kessels, Jos Egger

Objective: One consequence of alcohol-related cognitive dysfunction is impaired illness insight, which may hamper treatment outcome. That is, patients typically underestimate the amount of alcohol they have used, underestimate the length of their alcohol addiction, and misjudge the severe and adverse consequences of alcohol addiction on daily life and health functioning. In this study, we validated the Q8, a short questionnaire for the assessment of illness insight, in patients with Korsakoff's syndrome (KS) and alcoholic controls.

Participants and Methods: Ninety-seven patients alcohol use disorder (AUD) patients completed the Q8 as part of their regular assessment procedure. Forty-two were diagnosed as KS patients (29 men; mean age=57.4; range 42-77), fifty-five as alcoholic controls (38 men; mean age=54.7; range 30-76). The Q8 was validated by comparing it to the Dysexecutive Questionnaire (DEX) and relating it to tests for processing speed, memory and executive function. Internal consistency of the Q8 and correlations between the DEX and the neuropsychological measures were computed.

Results: Internal consistency of the Q8 was acceptable (Cronbach's alpha=0.73) and significant correlations between Q8 and the DEX questionnaire and the neuropsychological measures were found (r-values>.26, p< 0.05), indicating that a higher degree of illness insight is associated with more self-reported cognitive complaints and better cognitive functioning.

Conclusions: The Q8 is a short, valid and easy to administer questionnaire for assessing illness insight in patients with moderate and severe alcohol-related cognitive dysfunction.

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HIV/AIDS/infectious disease - Poster Session 2 - 14.30 - 17.00		
Number	**Presenter**	**Poster Title**
40	Silvia Cañizares	Inflammation and cardiovascular biomarkers are associated with cognitive performance in HIV patients.
41	M.H.M. Ensing	Switching to a non-Efavirenz containing regime improves cognition in HIV-infected patients
42	Naledi Ketlogetswe	Judgment/problem-solving and neuropsychological test performance in non-demented older adults with HIV
43	Garau Maria	How do the immunological state and years of evolution affect cognitive performance in HIV patients co-infected with HCV?
44	Sean B. Rourke	Contributions of social determinants of health and medical comorbidities to neurocognitive performance in people living with HIV: Population health results from the Ontario HIV Treatment Network (OHTN) Cohort Study
45	Marta Sobańska	The numerical Stroop task helps detect subtle decline in executive functioning in HIV-infected patients on effective HAART

Inflammation and cardiovascular biomarkers are associated with cognitive performance in HIV patients. Combination antiretroviral therapy restores CD4+ cell counts and supresses viral replication. However, immune activation and inflammation may persist

Berta Torres, Silvia Cañizares, Agathe León, Montserrat Plana, Llucia Alós, Mattia Squarcia, Miguel Caballero, Xavier Filella, Carlos Reverter, Naira Rico, Esteban Martínez, Jordi Blanch, Araceli Roussaud, Felipe García-Alcalde

Objective: The aim of this work was to examine if some cognitive functions in HIV-infected patients were related to some inflammation and cardiovascular biomarkers.

Participants and Methods: 12 volunteers, who were part of a larger longitudinal study, were recruited from the Hospital Clinic of Barcelona (Spain). Selected patients were on cART (EFV/FTC/TDF), viral load < 37 copies, CD4+ >250 cel/mm3 and without any significant coinfection.

Data examined here are cross-sectional and obtained in the baseline measurement. Participants underwent comprehensive neurocognitive and medical evaluations. The neuropsychological assessment comprised executive functions, speed of cognitive processing, motor speed, and learning and memory. Inflammation was evaluated by determination of plasma IL-6 and TNF-α. D-dimer was used as a marker of cardiovascular disease. A correlational analysis was performed. Bonferroni's correction was applied to comparisons.

Results: IL6 was positively related with cognitive slowing. D-dimer was positively associated with cognitive and psychomotor slowing, and inversely with verbal learning. A trend was found between IL6 and mistakes in cognitive flexibility, and also between d-dimer and mistakes in cognitive inhibition. However, statistical significance disappeared when Bonferroni's correction was applied.

Conclusions: Data suggest that some inflammation and cardiovascular markers could adversely affect cognitive performance in HIV patients, even in patients receiving treatment in the setting of a chronic and stable disease and without a HAND diagnosis. Results should be interpreted with caution due to limitations of the study.

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Switching to a non-Efavirenz containing regime improves cognition in HIV-infected patients

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Objective: HAND is a frequent comorbidity in HIV-infected patients. The aim of this study is to assess the effect of switching Atripla (a regimen containing Efavirenz which is known for its adverse neurological of psychiatric events), to Eviplera (same as Atripla, without Efavirenz) on cognition, hypothesizing participants' cognition will improve on Eviplera.

Participants and Methods: Participants N=48[32:16] were virologically suppressed male HIV-infected patients aged 25-50 on Atripla, without neurocognitive complaints. They were randomized (2:1) to receive Eviplera (intervention group) or continue on Atripla (control group) both for 12 weeks. At baseline and week 12, patients underwent neuropsychological testing, assessing the following domains; conceptual organization, executive functioning, speed of information processing, learning, memory, attention and working