

Poster presentation

Neuropsychological impairment in alcoholic cirrhosis: correlates and effects on One-year outcome

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Background

Patients with alcoholic cirrhosis are vulnerable to neuropsychological impairment due to years of heavy drinking and the effects of liver disease on brain function. Delineation of the neuropsychological impairment in alcoholic cirrhosis can assist clinicians in planning medical and substance abuse treatment programs.

Materials and methods

One hundred ten subjects with alcoholic cirrhosis were interviewed and followed for one year for alcoholism relapse and death. Subjects completed at baseline the Shipley Institute of Living scale, the Trails B test, the Personality Diagnostic Questionnaire and other measures of alcoholism severity. Subjects were followed for one year using daily diaries, interviews with collateral sources and medical record review. Statistical analysis included the Spearman correlation coefficient, ANOVA and Kaplan-Meier survival analysis.

Results

The subjects in this study had a mean (S.D.) age of 47.3 (9.3) years. Women comprised 24.6% of the study population. Thirty-one subjects (28.2%) relapsed to drinking and twenty-eight (25.5%) died in the one year follow up period. Thirty-five subjects (31.8%) received liver transplantation during the one-year follow up. Neuropsychological impairment (Trails B time) correlated with alcoholism severity ($r = 0.19$, $p < 0.05$, $df = 107$), personality psychopathology ($r = 0.238$, $p < 0.05$, $df = 107$) but not with duration of sobriety. There was a trend for subjects with evidence of cognitive impairment (SILS Verbal score-SILS Abstract Score > 15) to have higher relapse rates (39.2% versus 24.7%, Kaplan-Meier Chi-Square = 3.42, $p = 0.06$, $df = 1$). There was no association between cognitive impairment and one-year mortality.

Discussion

This study suggests that cognitive impairment in patients with alcoholic cirrhosis is a common and important clinical variable. Cognitive impairment should be further studied as a modifying variable for risk to relapse to drinking in this population.

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