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POSTER PRESENTATION

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Neurocognitive function declines are reversible following migraine headache in college students

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Introduction

Computerized testing of neurocognitive function yields an accurate and reliable assessment [1]. There is little research on short-term effects of migraine headaches on neurocognitive function or their cognitive recovery patterns[2].

Purpose/background/objective

The purpose of this study was to investigate neurocognitive function and recovery patterns in college students who incur migraine headaches compared to college students who do not.

Methods

Volunteers (ages 18-29) completed computerized neurocognitive baseline (B) testing. Forty-four migraineurs incurring a migraine (M) were matched to 44 non-migraine (NM) controls for sex, age and education level. Verbal and visual memory, processing speed and reaction time were measured at 24 hours, 48 hours and 7 days post migraine.

Results

Repeated measures ANOVAs revealed declines in neurocognitive function of migraineurs in verbal memory [mean diff(md)(24hr-B) M=-1.59±7.82, NM=1.19±7.69; =.045], visual memory [md (24hr-B)M=-4.70 +15.61, NM=3.05+10.94; p=.041], and reaction time [md(24hr-B) M=.02±.09, NM=-.01±.04].

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