carriers. This pattern suggests preferential brain-related effects of vascular risk factors, while the functional impact of such factors may be more closely aligned with fulminant vascular disease. Our results suggest cardiovascular health may be an important, potentially modifiable risk factor to help mitigate the cognitive and behavioral disturbances associated with having a pathogenic variant of autosomal dominant FTLD. Future studies should continue to examine the neuropathological processes underlying the impact of cardiovascular risk in FTLD to inform more precise recommendations, particularly as it relates to lifestyle interventions.

Categories: Stroke/Cerebrovascular Injury & Disease (Adult)
Keyword 1: aging disorders
Keyword 2: cardiovascular disease
Keyword 3: vascular cognitive impairment
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94 A Case Study Using Serial Neuropsychological Assessments to Understand the Effects of Recurrent Intracerebral Hemorrhages in an Individual with Cerebral Amyloid Angiopathy

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Objective: Cerebral amyloid angiopathy (CAA) is one of the most frequent causes of non-traumatic intracerebral hemorrhage (ICH). ICH recurrence risk is significantly higher in patients with CAA than for those without the condition, and CAA is a risk factor for the development of dementia, particularly Alzheimer's disease. There is a growing body of research describing neuropsychological impairment observed in patients with CAA. Among patients with a history of CAA-related ICH, the most commonly identified cognitive impairments include attention, processing speed, executive functioning, and episodic memory. However, little is known about potential additive or synergistic effects of each CAA-related lesion (such as recurrent ICHs) on cognitive functioning.
Participants and Methods: We present a case of a 74-year-old female with sporadic CAA, who had recurrent ICHs involving the left occipitoparietal lobe, left frontoparietal lobe, right occipital lobe, and left frontal lobe. She experienced residual visual impairment and probable Charles Bonnet Syndrome. Her clinical presentation and cognitive functioning were tracked with an inpatient neuropsychological evaluation completed after each ICH occurrence within the past year, as well as an outpatient neuropsychological evaluation completed approximately 3-months post-discharge from her most recent hospital admission. Record review, including clinical notes, lab tests, and imaging results supplement her performance on serial inpatient and outpatient neuropsychological evaluations.
Results: Data from three inpatient neuropsychological screenings and one lengthier outpatient evaluation are presented. With each inpatient evaluation, her profile demonstrated further cognitive decline involving visuospatial skills, semantic fluency, and episodic memory. In fact, results from her last inpatient screening raised concern for an underlying cortical degenerative process. In contrast, her follow-up outpatient evaluation, after three separate ICH events within one year, demonstrated an isolated set-shifting impairment, with intact performance across all other domains, which ruled out the prior suspicion of a cortical process.
Conclusions: While specific domains of cognition are more vulnerable in CAA, it is difficult to identify a specific and expected cognitive pattern given the extensive number of varied neurological insults patients typically develop throughout the disease course. This case demonstrates the wide range effects of repeated ICH, as well as the contrast between the acute effects of new lesions and the lasting effects of these lesions on cognitive ability after a period of recovery and stabilization. Given that our service was able to perform neuropsychological assessment in the acute phase of each ICH and in the subacute phase after a period of stabilization, this case adds to the literature by providing an example of the additive or synergistic effects of each CAA-related lesion over time.

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Keyword 1: cerebrovascular disease
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95 The Role of Gender in Cognitive Outcomes from Stroke

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Objective: Stroke is a prevalent disease and often produces cognitive impairment. Post-stroke cognitive impairment has been associated with challenges returning to interpersonal and occupational activities. Knowing what factors are associated with cognitive impairment post-stroke can be useful for predicting outcomes and guiding rehabilitation strategies. One such factor is gender. Previous research has not led to definitive conclusions as to whether there are gender differences in cognitive outcomes following stroke. This may be because other factors, including age at stroke onset, years of education, premorbid intelligence, and lesion volume, may account for apparent gender differences in cognitive outcomes of stroke. Here, we sought to examine whether there are gender differences in general and specific cognitive functions following stroke, beyond what can be accounted for by age at stroke onset, years of education, premorbid intelligence, and lesion volume.
Participants and Methods: Participants were 237 individuals in the chronic epoch (≥ 3 months) following ischemic stroke. Using multivariate linear regression, we examined gender as a predictor of overall cognitive functioning and specific cognitive functions, while controlling for age at stroke onset, years of education, premorbid intelligence, and lesion volume. To quantify overall cognitive functioning, we used a measure of general cognitive ability (g) and Full Scale IQ score from the WAIS. To quantify specific cognitive functions, we used scores from 16 individual neuropsychological tests.
Results: After controlling for demographic and lesion factors, men and women did not show any significant differences in overall cognitive functioning following stroke as measured by g (β = -0.01, 95% CI: -0.14 – 0.12, p = .887) or Full Scale IQ (β = -0.01, 95% CI: -2.93 – 2.27, p = .801). There were some significant gender differences on specific cognitive tests after controlling for demographic and lesion factors. Specifically, women performed better than men on the Rey Auditory Verbal Learning Test (ps < .001) and men performed better than women on the WAIS Information subtest (β = -.65, 95% CI: -0.97 - -0.33, p < .001).
Conclusions: Our findings suggest that although men and women have similar overall cognitive functioning after stroke, they show some differences in specific cognitive functions even after accounting for demographic and lesion factors. Namely, women demonstrated better performance on a test of learning while men demonstrated better performance on a test of verbal knowledge/comprehension. This information is important for clinicians as they assess cognitive outcomes in patients post-stroke and plan rehabilitation strategies.

Categories: Stroke/Cerebrovascular Injury & Disease (Adult)
Keyword 1: cognitive functioning
Keyword 2: stroke
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96 Short-Term Blood Pressure Variability and Cerebrovascular Health in Older Adults

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