Substantial adverse association of visual and vascular comorbidities on visual disability in multiple sclerosis.

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Abstract

BACKGROUND: Visual comorbidities are common in multiple sclerosis (MS) but the impact of visual comorbidities on visual disability is unknown.

OBJECTIVE: We assessed the impact of visual and vascular comorbidities on severity of visual disability in MS.

METHODS: In 2006, we queried participants of the North American Research Committee on Multiple Sclerosis (NARCOMS) about cataracts, glaucoma, uveitis, hypertension, hypercholesterolemia, heart disease, diabetes and peripheral vascular disease. We assessed visual disability using the Vision subscale of Performance Scales. Using Cox regression, we investigated whether visual or vascular comorbidities affected the time between MS symptom onset and the development of mild, moderate and severe visual disability.

RESULTS: Of 8983 respondents, 1415 (15.9%) reported a visual comorbidity while 4745 (52.8%) reported a vascular comorbidity. The median (interquartile range) visual score was 1 (0-2). In a multivariable Cox model the risk of mild visual disability was higher among participants with vascular (hazard ratio [HR] 1.45; 95% confidence interval [CI]: 1.39-1.51) and visual comorbidities (HR 1.47; 95% CI: 1.37-1.59). Vascular and visual comorbidities were similarly associated with increased risks of moderate and severe visual disability.
CONCLUSIONS: Visual and vascular comorbidities are associated with progression of visual disability in MS. Clinicians hearing reports of worsening visual symptoms in MS patients should consider visual comorbidities as contributing factors. Further study of these issues using objective, systematic neuro-ophthalmologic evaluations is warranted.

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