

CORRECTED PROOF

Associations of Cytomegalovirus Infection With All-Cause and Cardiovascular Mortality in Multiple Observational Cohort Studies of Older Adults

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Abstract

Background

Whether latent cytomegalovirus (CMV) infection in older adults has any substantial health consequences is unclear. Here, we sought associations between CMV-seropositivity and IgG titer with all-cause and cardiovascular mortality in 5 longitudinal cohorts.

Methods

Leiden Longevity Study, Prospective Study of Pravastatin in the Elderly at Risk, Longitudinal Study of Aging Danish Twins, and Leiden 85-plus Study were assessed at median (2.8–11.4 years) follow-up. Cox regression and random effects meta-analysis were used to estimate mortality risk dependent on CMV serostatus and/or IgG antibody titer, in quartiles after adjusting for confounders.

Results

CMV-seropositivity was seen in 47%–79% of 10 122 white community-dwelling adults aged 59–93 years. Of these, 3519 had died on follow-up (579 from cardiovascular disease). CMV seropositivity was not associated with all-cause (hazard ratio [HR], 1.05; 95% confidence interval [CI], .97–1.14) or cardiovascular mortality (HR, 0.97; 95%

CI, .83–1.13). Subjects in the highest CMV IgG quartile group had increased all-cause mortality relative to CMV-seronegatives (HR, 1.16; 95% CI, 1.04–1.29) but this association lost significance after adjustment for confounders (HR, 1.13; 95% CI, .99–1.29). The lack of increased mortality risk was confirmed in subanalyses.

Conclusions

CMV infection is not associated with all-cause or cardiovascular mortality in white community-dwelling older adults.

Keywords: [Herpesviridae](#), [cytomegalovirus](#), [seroepidemiologic studies](#), [immunoglobulin G](#), [mortality](#), [cardiovascular](#), [aged](#)

Topic: [factor v leiden](#), [immunoglobulin g](#), [infections](#), [cytomegalovirus infections](#), [cytomegalovirus](#), [mortality](#), [igg antibody](#), [older adult](#), [cardiovascular death](#), [community](#)

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