

# Cystatin C tied to cumulative hearing impairment

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(HealthDay)—Reduced kidney function, estimated using cystatin C, is

associated with 20-year cumulative incidence of hearing impairment (HI), according to a study published online April 26 in *JAMA Otolaryngology-Head & Neck Surgery*.

Carla R. Schubert, from the University of Wisconsin in Madison, and colleagues obtained data from the Epidemiology of Hearing Loss Study to examine the correlation between cystatin C (as a biomarker and a marker of [kidney function](#)) and 20-year incidence of HI. Data were included for 863 participants aged 48 to 86 years with cystatin C data and no HI at baseline.

The researchers found that cystatin C was associated with increased risk of developing HI in models adjusted for age and sex (hazard ratio, 1.20; 95 percent confidence interval [CI], 1.07 to 1.34 per 0.2-mg/L increase in cystatin C concentration). After further adjustments, including those for education level and current smoking, the correlation was attenuated (hazard ratio, 1.11; 95 percent CI, 0.98 to 1.27 per 0.2-mg/L increase in cystatin C concentration). Cystatin C was used to determine low estimated [glomerular filtration rate](#) in both the age- and sex-adjusted model as well as in the multivariable-adjusted model and was significantly associated with the 20-year cumulative incidence of HI (hazard ratios, 1.70 [95 percent CI, 1.16 to 2.48] and 1.50 [95 percent CI, 1.02 to 2.22] for

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