

# Factors identified for hearing loss in newborns with congenital cytomegalovirus

December 30 2022, by Elana Gotkine

---



Independent risk factors for congenital hearing loss have been identified

in newborns with congenital cytomegalovirus (cCMV) infection, according to a study published online Dec. 29 in *JAMA Otolaryngology-Head & Neck Surgery*.

Elise De Cuyper, M.D., from Ghent University in Belgium, and colleagues conducted a cross-sectional study of newborns with cCMV infection from six secondary and tertiary hospitals over 15 years (Jan. 1, 2007, to Feb. 7, 2022) to identify independent risk factors for cCMV-related congenital [hearing loss](#).

The researchers found that 416 and 617 (40.3 and 59.7 percent) of the 1,033 [newborns](#) included in the study were diagnosed with symptomatic cCMV infection and asymptomatic cCMV infection, respectively. Overall, 15.4 percent of the patients presented with congenital hearing loss, 50.3 percent of whom had isolated hearing loss. Three independent factors for congenital hearing loss were identified in a regression model: petechiae at birth, periventricular cysts on [magnetic resonance](#) imaging (MRI), and seroconversion in the first trimester (adjusted odds ratios, 6.7, 4.6, and 3.1, respectively). Patients with normal hearing had lower viral loads than those with congenital hearing loss (median viral load, 447.0 versus 1,349.5 copies/mL).

"Newborns infected with cCMV with petechiae at birth, periventricular cysts on MRI, or a seroconversion in the first trimester are at higher risk of congenital hearing loss," the authors write. "These risk factors may be used by clinicians to counsel parents in the prenatal and postnatal periods about the risk of congenital hearing loss."

**More information:** Elise De Cuyper et al, Risk Factors for Hearing Loss at Birth in Newborns With Congenital Cytomegalovirus Infection, *JAMA Otolaryngology-Head & Neck Surgery* (2022). [DOI: 10.1001/jamaoto.2022.4109](https://doi.org/10.1001/jamaoto.2022.4109)

Albert H. Park, Detecting Hearing Loss in a Child With Congenital Cytomegalovirus Infection—Finding the Elusive Needle in the Haystack, *JAMA Otolaryngology–Head & Neck Surgery* (2022). [DOI: 10.1001/jamaoto.2022.4155](https://doi.org/10.1001/jamaoto.2022.4155)

Copyright © 2022 [HealthDay](#). All rights reserved.

Citation: Factors identified for hearing loss in newborns with congenital cytomegalovirus (2022, December 30) retrieved 17 May 2023 from <https://medicalxpress.com/news/2022-12-factors-loss-newborns-congenital-cytomegalovirus.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.