

Congenital CMV infection in children who are deaf or hard-of-hearing and who use CI

Eva Karltorp¹, Ulrika Löfkvist¹

¹ Karolinska Institutet, CLINTEC

Background

Congenital cytomegalovirus (cCMV) infection is a common cause of hearing loss and deafness with or without comorbid conditions. However, there is still little knowledge about the long-term outcome of children who are born with cCMV in relation to their hearing, vestibular function and cognition.

Aim

The aim of this presentation is to share research findings and clinical experiences related to individuals with cCMV who have received cochlear implants (CI) at Karolinska university hospital, Stockholm.

Method

Data from several research studies at Karolinska Institute will be shared during the presentation to describe hearing, vestibular function and language outcome over time in a larger group of individuals with cCMV infection, and partly also in relation to hearing-matched control groups with a genetic cause of deafness.

Results

It is common with progressive hearing loss and late diagnosis of cCMV. The hearing ability with CI is usually good, while vestibular function is poor. Children may have age-equivalent vocabulary in a test-situation, but still have multiple comorbid conditions. Others have no other diagnosis or barely visible deficits like poor pragmatic skills and/or executive functioning besides severe hearing loss.

Discussion

Our data show that children with cCMV infection and CI are a highly heterogeneous group. Late onset of a range of symptoms have been identified among children and young adults with cCMV infection. Therefore, it is essential with early, and preventive actions and intervention.