

HEARING LOSS OUTCOMES AT 24 MONTHS IN ASYMPTOMATIC OR MILDLY SYMPTOMATIC CONGENITAL CMV ACCORDING TO TREATMENT GROUP

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BACKGROUND: Congenital CMV (cCMV) is the most common cause of non-genetic hearing loss (HL) in childhood. Evidence about treatment in asymptomatic or mildly symptomatic cCMV (A/MILD cCMV) cases is still lacking. We aimed to describe hearing outcomes at 24 months of age infants with A/MILD cCMV, depending on whether they have received antiviral treatment or not. Page | 31

METHODS: A multicenter study performed in a European cohort (cCMVnet registry) was performed. Included children had cCMV diagnosed in utero or in the first 21 days of life, with normal physical examination, ALT <80 U/L and platelets >100,000 cs/mm³ and absence of HL at birth. Cranial ultrasound (cUS) was normal or with minor findings (isolated lenticulostriate vasculopathy (LSV) and/or germinolysis/caudothalamic or subependymal cysts), and/or cranial MRI normal or with minor findings (same as cUS and focal/multifocal white matter involvement). Main outcome was the presence of HL at 24 months of age, defined as air conduction thresholds over 25 dB in any ear.

RESULTS: 196 patients with A/MILD cCMV met inclusion criteria. 68/196 (34.7%) received antiviral treatment with valganciclovir/ganciclovir (table 1). Children treated with antivirals had lower gestational age, lower birth weight, smaller head circumference, and primary infection in the mother was less frequent. Most infants with mild abnormalities in imaging were treated. Nine patients (4.6%) developed HL at 24 months. In the HL group 2 of 9

patients presented minor abnormalities in MRI (specifically subependymal cysts and focal white matter involvement), and received antiviral treatment. HL rate was similar in treated and non-treated groups (4.6% vs 6.3%; $p=0.6$).

CONCLUSIONS: One third of the children with mild cCMV were treated with antivirals. Most newborns with mild imaging findings at birth were treated. Rate of developing HL is similar among treated and not treated children.