

Update on treatment of cytomegalovirus infection in pregnancy: preliminary data from the regional reference center in Campania, Italy

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Objective. Cytomegalovirus (CMV) is the leading cause of congenital infection. 10% of affected infants present symptoms at birth and 40% of these can develop sequelae later in life. Valaciclovir is an antiviral drug which was approved in Italy in December 2020 for the prevention and treatment of CMV fetal infection. The objective of this study was to evaluate its efficacy in preventing infection in the fetus and/or severe symptoms in affected infants.

Materials and Methods. Pregnant women with CMV infection examined at Federico II University (Naples) were enrolled from January 2021. According to AIFA criteria, they received 8 g of valaciclovir daily until a negative amniocentesis or until delivery in case of positive amniocentesis and/or signs of mild/moderate fetal infection. Newborns were evaluated at birth searching for CMV-DNA in a urine sample. If positive,

they underwent laboratory and instrumental investigations in the first month of life to define the onset and therefore eligibility for treatment. Both symptomatic and asymptomatic infants continued periodic evaluations.

Results. Since January 2021, 16 women have been treated, without significant adverse events. Of 12 newborns, 10 were negative for congenital infection, while CMV-DNA was positive in both urine and blood samples for 2 of them. They were asymptomatic at birth and have not developed organ damage during ongoing follow up.

Conclusions. From this preliminary data, valaciclovir is a useful therapy for the prevention of fetal infection. This opportunity suggests the objective of serological screening for CMV in pregnancy to identify affected women and prevent its transmission to the fetus.