

A Case of Congenital Cytomegalovirus Infection with Presenting Phenotypes of Fetal Akinesia Deformation Sequence

Hiroyasu KAWANO^{1,2)}, Eiji OHTA^{1,2)}, Yasuhiro ONDA^{1,2)},
Toshikazu NIIMI^{1,2)}, Kazutoshi ITOU^{1,2)}, Fusako SASAKI^{1,2)},
Tatsuki MIYAMOTO^{1,2)}, Takashi SETOUE^{1,2)}, Masatoshi NAKAMURA^{1,2)},
Shinichi HIROSE^{1,2)}

¹⁾ *Division of Neonatology, Center for Maternal, Fetal and Neonatal Medicine, Fukuoka University Hospital*

²⁾ *Department of Pediatrics, Faculty of Medicine, Fukuoka University*

Abstract

Congenital cytomegalovirus infection (CCMVI) is the most common cause of intrauterine infection. In a severe case, it is likely to have symptoms of microcephaly, periventricular calcifications, chorioretinitis, hepatosplenomegaly, and petechiae. We describe a case of CCMVI with presenting phenotypes of fetal akinesia deformation sequence (FADS). At the 24th week of gestation, prenatal ultrasound detected microcephaly, cerebral ventriculomegaly, and arthrogryposis. At the 25th week, CMV IgG and CMV IgM antibodies were analyzed by testing maternal serum blood and were positive. At the 37th week, a female child, with a weight of 1742g, was delivered by selective cesarean section due to breech presentation. At birth, she had facial abnormalities and arthrogryposis, not typical symptoms of CCMVI. Still, brain CT detected cortical dysplasia and periventricular calcification, and we confirmed a diagnosis of CCMVI by using real time PCR in her urine sample. CCMVI with presenting phenotypes of FADS is rare, but CCMVI should be included in the differential diagnosis when a patient has a phenotype of FADS.

Key words: mother-to-child transmission, valganciclovir, fetal akinesia deformation sequence, cytomegalovirus, Zika virus