

TRANSFER OF CYTOMEGALOVIRUS BY MATERNAL MILK

J. Horáček, *R. Klen, **E. Pařízková, ***E. Pokorná, E****J. Juran

District Hygiene Station, *Cell Culture Centre, **Dept. of Pediatrics and ***Dept. of Ophthalmology, Medical School, Charles University, 500 36 Hradec Králové, Czechoslovakia

Received April 20, 1983

Cytomegalovirus (CMV) can be transferred to the offspring by transplacental route causing severe damage to the neonates. In contrast, when infected in perinatal or postnatal periods, newborns develop less frequently an overt disease. In pregnant women viraemia may occur after primoinfection. In addition, CMV is excreted in the milk (2, 3, 5) and shed in cervical secretions (3, 4).

We present a case of 29-year-old mother who excreted CMV in her milk from 3 to 6 weeks after delivery. The virus was also isolated from cervical secretions (4 weeks after labour). The baby developed anaemia, intrauterine hypotrophy and haemorrhages into *corpus vitreum*. CMV was isolated 15 weeks after birth from urine. Virus isolations were made starting 3 weeks after delivery from nasopharyngeal secretions of the mother and the newborn, from maternal blood, cervical secretions and milk and from the newborn's urine. Milk samples were examined directly and after heating (62.5 °C, for 20 min). CMV antibodies were tested by complement fixation employing an antigen prepared in alkaline glycine buffer (1). The results are summarized in the Table.

Sample	Weeks after delivery								
	3	4	6	8	9	14	15	16	39
Mother:									
Milk	+	+	+	NT	-	-	-	-	NT
Cervical secretions	+								
Serum antibodies					< 8*				256
Newborn:									
Urine	NT	-	-	NT	NT	-	+	-	-
Serum antibodies			< 8*		< 8			8	

NT — not tested * CF titre

Shedding of CMV from cervical secretions is more frequent in pregnant women; in the 1st trimester it was found in about 2% and in the 3rd trimester in nearly 12% of women (2, 4). Hayes *et al.* (3) found CMV shedding in cervical secretions of 17 out of 63 (27%) seropositive pregnancies. The frequency of postnatal infection of the neonates may be high due to the close contact with the mother. CMV may be transferred not only to the own baby, but also to babies of other women fed with contaminated milk. The greatest danger comes from fresh untreated milk. Conservation and storage decrease the risk of infection, pasteurization seems to be fully effective.

References

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