

## SUMMARY OF THESIS\*

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CANTO, Cynthia L. Motta do – Contribuição ao estudo da epidemiologia da citomegalovirose em crianças portadoras da síndrome de Down. São Paulo, 1999. (Tese de Mestrado – Escola Paulista de Medicina/Universidade Federal de São Paulo).

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### EPIDEMIOLOGICAL STUDY OF CYTOMEGALOVIRUS IN CHILDREN WITH DOWN SYNDROME

Cytomegalovirus (CMV) infection is usually acquired by close contact with individuals excreting the virus in their saliva, urine and other secretions. There is evidence that children in special care-centers such, as those with Down syndrome, are at higher risk of acquiring infections.

The purpose of this study was to evaluate the prevalence of CMV infection in children with this syndrome attended at APAE-SP, Brazil. CMV antibodies (IgG and IgM) were detected by immunofluorescence assay. Shedding of virus in saliva and urine was demonstrated by culture in human foreskin fibroblasts, nested PCR assay and detection of pp65.

The prevalence of anti CMV IgG antibodies was 76.6% (92/120) and IgM anti CMV antibodies was detected in 10% (12/120) of the

seropositive children. During the first viral inquire, CMV was detected in urine or/and saliva in 43.3% of the seropositive children. In the second and third viral inquires, CMV was detected in 41/89 (46%) and in 35/89 (39.3%) of those children, respectively. About 18 months after the first collect, seroconversion of anti CMV IgG antibodies was observed in 10/26 (38,4%) of the initially seronegative children. From those children 4 (15.3%) presented anti CMV IgM antibodies, characterizing acute CMV infection.

This study demonstrates that there is a high prevalence of CMV shedding in urine and saliva in children with Down syndrome. This finding suggests that there is a high risk of CMV infection in seronegative individuals, parents, care takers or are cared for in centers for mentally handicapped children.