SUMMARY AND CONCLUSION

CMU is thought: to be the most common viral disease causing neurological damage in children •

The purpose of this work is to evaluate the incidence of cytomegalovirus complement-fixing antibody in th~ sera of mentally retarded children •

Our work was carried out on 60 child from Benha University Hospital, Pediatric Department, 40 of them were mentally retarded and 20 child were with normal intellige-nce as a control •

5 c.c. of venous blood sample was collected from each child, after centrifugation sera were separated and subjected to estimation of CMU antibodies by a complement fixation test •

Our results showed that CMU complement-fixing anti-bodies were present in 25 of 40 (62.5%) mentally retarded children their ages ranged from 3 months to 12 years old, while B children out of 20 (40%) normal control at the same age were seropositive •

The incidence of CMU complement-fixing antibody at the age from 3 months to one year was (50%), from one year to 5 years was (60.9%), and from 5 years to 12 years was (77.7%).

In mentally retarded microcephalic children the seropositive rate was (82.2%), while it was (58.8%) in mentally retarded normocephalic childran •

We found that the seropositive rate was mpre in cases of breast feeding (73 %) than in artificial feeding children (43%), and more in cases associated with congenital anomalies (66.6%) than in cases without congenital anomalies (43%).

From this work we can conclude that :

1. The incidence of CMV complement-fixing antibody in mentally retarded children is higher than that in normal children, so CMV infection can be considered as a causal agent of mental retardation •
2. Congenital cytomegalovirus infection may lead to microcephaly and associated congenital anomalies.
3. Infected mother may transmit CMV to her child via breast milk, so, a trial of development of a protecting vaccine against CMV infection especially to women at the child bearing period must be activly investigated •