NEUTRALIZATION OF Dengue VIRUS
BY IgM AND IgG ANTIBODIES
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Summary

Anti-dengue neutralizing properties of IgG and IgM antibody were studied by using infected monkeys as a source of anti-dengue immunoglobulin. *Macaca irus* monkeys were experimentally infected with dengue-1 virus. HI, CF and N tests were performed to detect antibody titers of sera following infection. Neutralising antibody was measured by plaque reduction neutralization test. Sera were fractionate by DEAE cellulose chromatography and gel filtration. Fraction I from DEAE cellulose chromatography contained highly purified IgG immunoglobulin as shown by immune-electrophoresis and by single radial diffusion, fraction III from DEAE chromatography were contaminated with some IgG immunoglobulin. IgM fractions from gel filtration were free of IgG but with low concentrations and low antibody titers. HI tests and PRNT indicated HI and N antibody activities were associated primarily with IgM immunoglobulin on day 14, HI and N titer were associated with IgG immunoglobulin on day 60. Only IgG immunoglobulin had CF activity; IgM fractions had no CF titer. The results from kinetic neutralization test indicate that anti-dengue IgG and IgM antibodies have similar rates of neutralization, and both have a relatively high degree of avidity.