IMMUNOGLUBULINS IN THE INTESTINE AND STOOL OF CHOLERA PATIENTS.

DR. ROBERT S. NORTHRUP

Pakistan-SEATO Cholera Research Lahoratory, Dacca.

Much attention has been focussed recently on the immunoglobulins present in various external secretions, including tears, saliva, colostrum and nasal and pulmonary secretions. Immunoglobulin A (IgA) has been shown to be predominant, and to exhibit protective activity against some infections, in particular, infections caused by viruses. Other workers studying the stool of cholera patients, found that there too IgA was the predominant immunoglobulin.

We proposed to study further the nature of this cholera stool IgA. Having collected stool from a typical positive cholera patient, we froze it immediately and then lyophilyzed it. Reconstituting it in a concentrated state, we incubated it at 56°C for 30 minutes to remove proteolytic enzyme activity, and then performed immuno-electrophoresis and Ouchterlony double diffusion analyses with it using various specific antisera. Sephadex chromatography was also performed and the resulting eluates tested for various immunoglobulins and immunoglobulin fragments. We found that cholera stool IgA is secretory rather than serum in type and this, however, despite the rapid transit through the intestine, does not protect it from being partially proteolyzed by intestinal enzymes, although to a lesser extent than immunoglobulins G and M. Preliminary studies using a radio-Ouchterlony technique suggest that this IgA contains antibody activity against *V. cholera*. These findings will also be presented.

SERUM LEVEL, BIOCHEMICAL AND MICROBIOLOGICAL STUDIES WITH SINGLE DOSE OF A NEW BROAD SPECTRUM ANTIBIOTIC—VIBRAMYCIN.

DRS. TOFAYEL AHMED, AND NAFEES S. KHAN

Department of Paediatrics, Jinnah Postgraduate Medical Centre, Karachi.

34 cases were studied with Vibramycin. Of these serum level studies were carried out in 11 cases with Vibramycin on the first treatment day. Blood was taken at 3 and 24 hours after administration of the drug on first treatment day, with a dosage of 2 mg|per Kg. of body weight. The results are very striking and showed a significant difference from other blood level studies done by various investigators.

Liver function tests such as serum bilirubin, alkaline phosphatase, S.G.O.T., S.G.P.T. and Thymol Turbidity were carried out in all cases to verify liver function studies and blood urea was also done in all cases to see renal functions.

Culture and sensitivity studies were done in all cases. Throat swabs were positive in 15 cases. Organisms isolated were mainly Pneumococci and Strepto haemolyticus. The results showed no symptoms of intolerance and no evidence of any hepatic and renal damage nor that of suppression of the haemopoetic system with Vibramycin.

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