

BIOLOGICAL PRODUCTS IN PAKISTAN

DR. ZAHID HUSSAIN KHAN

*Director, Bureau of Laboratories, National Health Centre,
Islamabad.*

Keeping in view the field controlled trials conducted by the world agencies, the efficacy of the Typhoid vaccine is to be discussed. The control field studies of Typhoid vaccines have indicated that Typhoid vaccines do not protect against para-typhoid fever. It is also recommended that, during the enteric fever, vaccine prepared from Sal. Typhy-2 should be used as an antigen for mass immunization to control the disease.

It is also concluded that para-typhoid B antigen is of little effectiveness, at least, so far, the field surveys are concerned. For paratyphoid A antigen, there is no reliable information about its efficacy to control the disease as no field trials have been carried out with this antigen. Laboratory studies of para-typhoid have been very limited and their significance is doubtful. The role of para-typhoid antigen in the control of diseases is doubtful.

The control measures of rabies have been discussed at length. The mode of control of the disease, epidemiological aspect, the significance of vaccination and application of hyper-immune serum have been presented.

STUDIES ON THE NATURE OF ANTIBODIES IN CHOLERA

DRS. A. K. BHATTACHARJEE, AND W. H. MOSLEY

*Pakistan-SEATO Cholera Research Laboratory,
Dacca.*

Previous studies in this Laboratory on the nature of antibodies in cholera by 2-mercaptoethanol fractionation showed that the sera in the acute phase of the disease contains low titer vibriolysin antibody that is mostly or wholly degradable with 2-mercaptoethanol, i.e., it is probably IgM and the convalescent sera possess high titer antibodies which are partially degradable, i.e., they are a combination of both IgM and IgG.

More definite evidence has now been obtained about the nature of these antibodies by density gradient ultracentrifugation. The types of sera used in this study were as follows :

Sera from :

- (a) acute and convalescent cholera patients,
- (b) normal Pakistani adults,
- (c) normal Americans,
- (d) normal Czechoslovaks, and
- (e) cord blood of Pakistani infants.

The results indicated that the natural or non-specific antibody found in American and Czechoslovak sera, as also in the sera from acute cholera patients, belongs to the class of immunoglobulins called IgM. These sera had no vibriocidal activity in the fractions containing IgG. The sera from normal Pakistani adults and convalescent cholera patients, however, had vibriocidal activity in both IgM and IgG fractions. A gradual rise of the vibriocidal antibody in the IgG fractions during recovery from the disease was also noted. Analysis of cord blood sera showed that the antibody activity was present only in the fractions containing IgG.

M07723 5471

JINNAH POSTGRADUATE MEDICAL CENTRE
KARACHI



SEVENTH ANNUAL
MEDICAL
SYMPOSIUM

AUGUST 12—17, 1968

AT

THE BASIC MEDICAL SCIENCES DIVISION
JINNAH POSTGRADUATE MEDICAL CENTRE, KARACHI