

to severely dehydrated patients immediately after hospital admission. Liquid stool sample and rectal swab were first examined directly by darkfield and phase contrast microscope. Specimens which were initially negative were finally examined after enrichment in Sile peptone broth for 3 hours at 1 hour interval. If any organism with the typical darting motility of *Vibrios* were observed it was tested for inhibition of motility by Gardner and Venkatraman O group I *V. cholerae* antiserum. If motility ceased in antiserum it was identified as *Vibrio cholerae*. The organism was then serologically typed with Inaba and Ogawa antiserum. If O Group I *V. cholerae* antiserum had no effect on the *Vibrio* motility, the organism was considered to be non-agglutinating *Vibrio*. This screening has been found to facilitate selecting patient negative for *Vibrios* for other studies like *E. coli* and Rota Virus diarrhea. The bloody mucoid stool may be selected for dysentery study. From a total of 1355 patients screened, 656 were found to be *Vibrio cholerae*, 37 to be non-agglutinating *Vibrio*. In about 96% of the cases could be *Vibrios* identified by dark field from liquid stool samples whereas the percentage is much lower from rectal swabs. It was also found that 3 hours enrichment culture was more suitable than direct examination for the detection of *Vibrio* by dark field microscopy.

138. Adhesive properties of NAG *Vibrio cholerae* to isolated rabbit brush border membrane.

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Non-agglutinating *Vibrio cholerae* adheres to the brush border membrane isolated from rabbit small intestinal epithelial cells. The rate of adhesion was found optimum at 30°C on agitation. The adhesion of *Vibrios* on the brush border membrane becomes firm when they were allowed to adhere for about 30 minutes. Different NAG *Vibrio cholerae* strains belonging to Heiberg's group I, II, V and VI numbering 40, 106, 37 and 22 respectively were included in the study. The maximum number of *Vibrios* of group I, II, and V adhered on brush borders whereas very few of group VII adhered. *Vibrio parahaemolyticus* did not adhere at all on to the brush border membrane. Forty Tetracycline and Streptomycin resistant strains belonging to group II, V and VII were also included in the study. Adherence patterns were found to be same in this group as with the sensitive strains.