other vibrios (1.75%), *Aeromonas* sp. (6.5%), and *Plesiomonas shigelloides* (5.0%). Enrichment of watery stool for 6 h in BPB increased isolation rate of *V. cholerae* O139 in comparison with 4 h and overnight enrichment culture and direct plating. TTGA was superior to TCBS agar with respect to isolation efficiency (100% vs. 93.08%) and results of slide agglutination (100% vs. 54.55%) and oxidase tests (100% vs. 1.66%). When 285 watery stool samples were tested by dark-field microscopy, slide coagglutination test (COAG) and standard culture methods for the detection of *V. cholerae* O139, the sensitivity, specificity and accuracy of coagglutination test were 97%, 100% and 99% respectively. The dark-field microscopy showed similar results. Both tests had positive and negative predictive values of 100% and 98% respectively.

Conclusions: The findings indicate that *V. cholerae* O139 was the major aetiologic agent of cholera in Dhaka during the study period. TTGA appears to be superior to TCBS for the detection of *V. cholerae* O139. Faecal enrichment is essential for optimum isolation. Coagglutination test and the field microscopy are simple, rapid, low-cost and reliable for the detection of *V. cholerae* O139 from faecal samples.

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Description of Clinical and Laboratory Features of Severe Cholera Due to Vibrio Cholerae O139 (Bengal)

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Objective: Describe the clinical and laboratory features of *Vibrio cholerae* O139 infection.

Methods: A large epidemic of cholera due to a newly-recognized strain of *V. cholerae*, designated as *V. cholerae* O139 was reported from south India and Bangladesh in late 1992 to mid-1993. During the epidemic, there had been a large influx of patients with severe cholera-like diarrhoea into the ICDDR,B hospital in Dhaka, Bangladesh. To describe the clinical course of illness due to this new strain of *V. cholerae*, 22 adults (age 18-60 years) with severe diarrhoea were studied at the ICDDR,B hospital in Dhaka. Patients were managed with intravenous (IV) or oral rehydration fluids during the study period. A course of tetracycline was prescribed at the time of discharge.

Results: The important features of patients were: presenting with frequent watery stools, vomiting, dehydration, and hypovolaemic shock. The mean (±SD) volume of stool (ml) during the 1st, 2nd, 3rd, 4th, and 5th day were : 8,768 ± 5,164; 4,734 ± 3,514; 3,544 ± 2,753; 1,387 ± 1,648; and 628 ± 1,107 respectively. The total volume of stool during the entire illness was (mean ± SD): 23,210 ± 13,944 ml. The total volumes of IV and ORS required for the treatment of patients were: 6,113 ± 2,649 and 18,934 ± 10,279 respectively. Stool became soft in 82% of the patients by day 3, and all patients recovered from diarrhoea by day 4 of hospitalization. Serum electrolyte (Na^+, K^+, Cl-) concentrations were normal before hydration. TCO_2 mildly decreased (13 ± 3.7 mmol/l) indicating isotonic dehydration with mild acidosis. Faecal concentrations of Na^+, K^+ and CO_2 were 120 ± 24, 26 ± 18 mmol/l and 37 ± 9 respectively. Mean haematocrit on admission was 56 ± 3.2 % which declined to normal after rehydration. All patients had moderate leucocytosis, and 23% to 50% of the stools contained red blood cells and leucocytes respectively. The mean duration of faecal excretion of *V. cholerae* O139 was 6.7 days. All patients recovered without any residual complications.

Conclusions: These findings indicate that the clinical and laboratory features of *V. cholerae* O139 are similar to those of *V. cholerae* O1, and that treatment can be based on clinical diagnosis.

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