Efficacy of Tetracycline in the Treatment of Cholera Due to Vibrio Cholerae O139

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Objective: Evaluate the effectiveness of tetracycline in the treatment of acute watery diarrhoea due to *V. cholerae* O139.

Methods: A randomized placebo-controlled double-blind clinical trial was carried out during September through November 1993. Fory-three males with severe cholera (22 placebo and 21 tetracycline group) attending the ICDDR,B's hospital in Dhaka, Bangladesh were studied. Patients were randomized to receive either capsule tetracycline 500 mg six hourly for three days or an identical placebo.

Results: Results showed that stool weights were similar in two groups during the first 24 hours (drug 8,437 ± 5,601 g and placebo 8,767 ± 5,164 g, p=0.67). During the second 24 hours, there was a significant reduction of stool weight in the tetracycline group compared to placebo group (1,394 ± 1,512 g vs. 4,519 ± 3,574 g, p=0.0012). During the 3rd 24 hours, the difference of stool weight was more striking (drug 560 ± 1,010 g, placebo 3,587 ± 2,791 g, p=0.0001). Significant difference was also observed in the total weights of stool between start of treatment and end of diarrhoea (drug 9,527 ± 6,863 g and placebo 18,185 ± 11,695 g, p=0.015) The mean duration (h) of diarrhoea was reduced by 58% (32 ± 17 h vs. 77 ± 38 h, p=0.010). Tetracycline significantly reduced the faecal positivity rate of *V. cholerae* O139 at 48 hours (76% vs. 01%, p=<0.001). Tetracycline also reduced total amount of intravenous fluid required compared to placebo (drug 8,219 ± 4,165 ml and placebo 12,019 ± 8,401 ml, p=0.014).

Conclusions: These results suggest that tetracycline is an effective drug for the treatment of acute watery diarrhoea due to *V. cholerae* O139.

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Comparison of the Efficacy of a Single-Dose Ciprofloxacin and of a Single-Dose Doxycycline in the Treatment of Cholera Due to Vibrio Cholerae O139

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Objective: Compare the efficacy of a single 1 g dose of ciprofloxacin with that of a single 300 mg dose of doxycycline in the treatment of cholera due to *V. cholerae* 0139.

Methods: More than 100,000 diarrhoea patients are seen annually at the ICDDR,B's Dhaka-based hospital, and the Clinical Research and Service Centre. Cases were selected from these patients. Of 129 evaluable adult males with severe diarrhoea due to *V. cholerae* O139, fifty-nine were randomly assigned to receive ciprofloxacin and 70 to receive doxycycline.

Results: Treatment was considered to be clinically successful in 54 (91.5%) and 64 (91.4%) of the patients in the ciprofloxacin and doxycycline group respectively. However, the difference was not statistically significant. Similarly, the total volumes of watery stool during the entire period of the study were comparable in the treatment groups. However, only 1 (1.7%) patient in the ciprofloxacin group had bacteriologic failure compared to 15 (21.4%) patients in the doxycycline group (p=0.002).

Conclusions: Efficient management of dehydration remains the cornerstone in the management of patients with cholera. However, treatment with effective antimicrobial agents is useful in significantly shortening the duration of diarrhoea and the volume of watery stools, and in shortening the duration of faecal excretion of the pathogen. From