Zinc supplementation in children with cholera in Bangladesh: randomised controlled trial.


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OBJECTIVE: To investigate the impact of zinc supplementation in children with cholera. DESIGN: Double blind, randomised, placebo controlled trial. SETTING: Dhaka Hospital, Bangladesh. PARTICIPANTS: 179 children aged 3-14 years with watery diarrhoea and stool dark field examination positive for Vibrio cholerae and confirmed by stool culture. INTERVENTION: Children were randomised to receive 30 mg elemental zinc per day (n=90) or placebo (n=89) until recovery. All children received erythromycin suspension orally in a dose of 12.5 mg/kg every six hours for three days. MAIN OUTCOME MEASURES: Duration of diarrhoea and stool output. Results 82 children in each group completed the study. More patients in the zinc group than in the control group recovered by two days (49% v 32%, P=0.032) and by three days (81% v 68%, P=0.03). Zinc supplemented patients had 12% shorter duration of diarrhoea than control patients (64.1 v 72.8 h, P=0.028) and 11% less stool output (1.6 v 1.8 kg/day, P=0.039). CONCLUSION: Zinc supplementation significantly reduced the duration of diarrhoea and stool output in children with cholera. Children with cholera should be supplemented with zinc to reduce its duration and severity. Trial registration Clinical trials NCT00226616.

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