Management of shigellosis in undernourished children

Summary of published paper

Acute Shigellosis can be one of the major causes of mortality in emergencies. Between 46-63,000 Rwandan refugees were believed to have died from dysentery in the Goma camps in 1994/95. Above Goma, Eastern Zaire.

Tens of thousands of Rwandan refugees were believed to have died from dysentery in the Goma camps in 1994/95. Above Goma, Eastern Zaire

To date there have been few reports on the impact of dietary interventions on the clinical course of acute shigellosis. Current management of the disease is primarily focused on antibiotic therapy with less emphasis on nutritional management. A recent randomised clinical trial examined the role of an energy-dense diet on the clinical outcome of malnourished children with acute dysentery due to shigellosis. Seventy five children aged 12-48 months with acute dysentery randomly received either a milk-cereal formula with an energy density of 4960 kJ/l (1185 kcal/l) (test group) or a milk-cereal formula with energy of 2480 kJ/l (593 kcal/l) (control group) for 10 days in hospital. In addition the standard hospital diet was offered to all children and all received an appropriate antibiotic for 5 days.
There was no difference between the two groups in resolution of fever, dysenteric stools and stool frequency. However, vomiting was more frequently observed among the test group children during the first five days. There was a statistically significant increase in the mean weight for age in the test group compared to the control group after the 10 days of dietary intervention. In addition there was a statistically significant resolution of rectal prolapse in the test group after five days of dietary intervention. The observed difference in proportion of children with a rectal prolapse is most likely to be related to the nutritional improvement in the test group.

In conclusion, this study indicated that supplementation with a high energy diet did not have any adverse effect on the clinical course of acute shigellosis, led to improved weight gain and reduced the incidence of rectal prolapse in malnourished children.
