

Prescribing Pattern of Zinc and Antimicrobials in Acute Diarrhea

IAP Task Force on Management of Acute Diarrhea recommends 20mg of elemental zinc to be given to all children with acute diarrhea older than 6 months and 10 mg to all children aged 2 to 6 months for 14 days(1). We studied the pattern of prescriptions of zinc in acute diarrhea and its relationship to the antimicrobial prescribing patterns in a private tertiary care children's hospital. We carried out a retrospective analysis of case records of children aged 1 month-5 years who were admitted for acute watery diarrhea between June 2004 to May 2007, at Kanchi Kamakoti CHILDS Trust Hospital, a private tertiary care hospital for children. These case records were analyzed for prescriptions of zinc, their formulation, dosage and the details of prescriptions of antibiotics. During this period, 1700 children were hospitalized for acute diarrhea out of 37,296 (4.5%) admissions. Of these 1700 children, 120 were aged 2 to 6 months, 728 between 6 months to 1 year and 852 children between 1 and 5 years of age. Of these, 163(9.5%) children had features of severe dehydration and 24 (1.4%) had grade IV protein energy malnutrition (as per IAP Classification). Zinc was prescribed in 1,111(65%) out of 1,700 children. Over the period of

3 years, prescriptions of zinc increased gradually from 51% in 2004 to 75% in 2007. Amongst the various formulations of zinc (syrup, tablet and capsules), syrup formulation was commonly prescribed in 59%. Of the 1,700 children, 712 (41.8%) received antimicrobials. Ceftriaxone was the most commonly used antimicrobial in 25.8% followed by amikacin in 25%. Persistence of fever >38°C and loose stools for more than 48 hours was noted to be the common parameter for antimicrobial prescriptions. The usage of antimicrobial significantly dropped from 54.9% in 2004 to 28% in 2007, thus suggesting that zinc use might have resulted in reduced usage of antimicrobials in acute diarrhea. However, other variables which could have influenced the decline in antimicrobial use were not studied. Our findings reinforce the need to propagate the use of zinc which might reduce the indiscriminate antimicrobial usage in acute diarrhea.

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REFERENCE

1. IAP Guidelines 2006 on Management of Acute Diarrhea. *Indian Pediatr* 2007; 44: 380-389.

Situs Inversus with Autosomal Recessive Polycystic Kidney Disease

Situs inversus totalis and autosomal recessive polycystic kidney disease occur with an incidence of 1/10000 in the general population(1) and 1 in 20,000 live births, respectively. Association of the two conditions is rare; a medline search revealed only two such cases(2,3). Recent studies have revealed ciliary dysfunction as a cause of both conditions(4,5).

A 10-month-old boy (birthweight 1650 g), born of nonconsanguineous parents, was admitted with history of abdominal distension since birth and fever of 10 days duration. The baby was delivered at 34 weeks of gestation by induction of labor due to severe oligohydramnios. The postnatal period was uneventful. On examination, he was alert, with stable vital signs except for a blood pressure of 140/90 mm Hg. There were no dysmorphic features or limb anomalies. Abdomen was distended, with bilateral renal masses. Liver was palpable 2 cm