

bodies are: hoarseness, cough, aphonia, odynophonia, wheezing, dyspnea, stridor, cyanosis, apnea and a subjective sensation of foreign body. Non-obstructive foreign bodies, however, may not produce any symptoms after the initial bout of cough as in the present case. This, in the present case, was possibly because the stainless steel ring excited very little tissue reaction. Management of foreign bodies in the larynx is removal under general anesthesia after direct visualization. It may sometimes require tracheostomy(3). Back blows, chest thrusts and Heimlich's manoeuvre are avoided unless there is complete obstruction which may prove fatal.

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REFERENCES

1. Cassissi NJ, Issacs JH Jr. Trauma. In: Otolaryngology, Head and Neck Surgery. Ed Cumming CW. New Delhi, B.I. Publications Ltd, 1990, pp 1943-1964.
2. Yadav SPS, Goel HC, Munjal SK. Foreign body larynx: An unusual mode of entry and presentation. Indian Pediatr 1990, 27: 300-302.
3. Parella MM. Unusual foreign body of trachea and intrinsic bee sting of larynx. J Laryngol Otol 1964, 78: 89-92.

Irrational Use of Oral Rehydration Solutions

Diarrhea is one of the major factors of morbidity and mortality in children in de-

veloping countries. It is now proved beyond doubt that the early use of oral rehydration solution (ORS) is the most effective method to reduce this morbidity and mortality. Due to wide publicity, the use of ORS is increasing. However, occasionally clinical problems arise out of irrational use of ORS due to lack of knowledge on part of the health workers and parents. One clinical problem, occasionally seen is swelling of legs and sometimes face due to excessive use of ORS.

Over the last 6 months, we have seen 22 cases between 0 and 7 years of age, amongst 1027 cases of diarrhea admitted in children ward, having swelling of legs and face due to use of ORS as the only fluid since onset of diarrhea. In all cases, clinical dehydration was absent, nutritional status was mostly Grade-I malnutrition (IAP classification) and babies were fed only ORS. Six cases of 112 admissions (5.4%) were among 0-3 months age group, 8 out of 308 (2.6%) were among 3 months to 1 year and 8 out of 607 cases (1.3%) were above 1 year of age. Puffiness disappeared within 2-5 days of withdrawal or marked diminution of ORS intake and liberal intake of free water to satisfy thirst in all cases and allowing milk feeding in infants and soft diet in elderly children.

In a survey amongst health personnel of our hospital, 52 doctors and 82 nurses, 25% advised ORS as the only fluid during diarrhea, 65% advised use of ORS and free water and 10% advised only free water. This reflects the paucity of knowledge regarding use of ORS amongst the health workers.

In usual infantile diarrhea, sodium loss in stools is around 50 mmol/L and sodium concentration in the consumed universal ORS (WHO) is 90 mmol/L(1). Replacement of the free water requirements solely

by ORS may result in increase of total body sodium and increase in volume of extracellular water, leading to puffiness. To avoid this complication ORS should be given from the onset of diarrhea with each episode of stool or vomiting, and free water and/or breast feeding continued. It has been suggested that ORS solutions with different sodium concentrations (50-90 mmol/L) should be made available for different age groups in order to prevent problems of hypernatremia and fluid overload(2). However, this would require medical advice to be available at the onset of diarrhea, so as to prevent dehydration and morbidity. As medical advice is often not readily available, there is a possibility of either selection of a wrong type of ORS by the mother or ORS use may be withheld in apprehension of wrong selection. In both situations the most useful preventive role of ORS is jeopardized. Therefore, it is recommended that only one ORS containing 90 mmol/L sodium be used with proper directions printed on each packet. The ORS solution may be administered following each episode of loose motions. Free drinking water and milk should be allowed *ad lib* in between.

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REFERENCES

1. Hamilton JR. Infections of the intestine. In: Nelson Textbook of Pediatrics, 13th edn. Eds Nelson WE, Behrman RE, Vaughan VC. Philadelphia, WB Saunders Co, 1987, pp 792-793.
2. Mittal SK. Oral rehydration: Universal solution. *Indian Pediatr* 1986, 23: 895-897.

Aminoglycoside Nephrotoxicity in Clinical Practice

The recent article by Bagga *et al.* highlights the important and often neglected issue of gentamicin nephrotoxicity in clinical practice(1). While their recommendations regarding the rational use of this group of drugs are indeed justifiable, the authors have not substantiated with clinical data the incidence of renal function deterioration in their patients who were treated with gentamicin. There is a paucity of information regarding the presence of other reversible and pre-renal factors which would not be uncommon in these hospitalized children. Further, there is lack of clinical data regarding the presence of additional predisposing risk factors. One would also tend to disagree with the criteria of urine casts and proteinuria as basis for the diagnosis of gentamicin nephrotoxicity. It would also be worthwhile to compare the urinary findings in the group of patients showing nephrotoxicity with the rest of 107 patients who tolerated gentamicin well.

Aminoglycosides are indeed the most common cause of drug induced renal failure in hospitalized patients(2). However, they continue to remain the sheet anchor of most antimicrobial regimens in view of their excellent clinical efficacy and low cost. Further, infants and small children can tolerate larger doses than adults and hence have lower incidence of adverse renal effects. Still renal insufficiency represents an additional complication for severely sick children which may prolong hospitalization and increase the economic burden. This nephrotoxicity is dose dependent and usually manifests as polyuria followed in short order by increase in serum creatinine and blood urea nitrogen(3).