Acute gastroenteritis in a 2 year old male child…..

Presenting complaints

A 2 year old male was brought to the pediatric outpatient department with a 24hours history of diarrhea and intermittent vomiting with fever. According to the mother the child was passing stools 8 -10 times a day, which was watery without a foul smell, blood or mucus. The child had started vomiting only since the previous evening. He was vomiting episodically and the vomitus mostly contained ingested food material. Fever was high grade and used to come down with antipyretic. Urine output was normal.

The child was able to take feeds orally but not to his normal capacity. Since both the parents were working he was kept in a daycare center and recently one of the children there had a diarrheal episode.

Past history

The baby was born through normal vaginal delivery, was breast fed for 4 months and had normal milestones. There was no history of any similar illness or antibiotic use in the recent past.

On examination

- The child was moderately nourished and slightly tired and drowsy
- Eyes were sunken and there was loss of skin elasticity. Mucus membrane was moist.
- Febrile with a pulse of 100/min and respiratory rate of 24/min.
- Weight was 12kg
- His abdomen was soft, non-tender with normal bowel sounds and no organomegaly.
- Vitals were normal
- The rest of his examination was normal.

Laboratory investigations

- Hemoglobin: 11.2 gm/dL
- WBC: 9800/mm^3
- Electrolytes:
  - Na: 114 mEq/L
  - K: 3.5 mEq/L
  - Cl: 98 mEq/L
  - HCO_3^-: 25 mEq/L
- Stools Examination: Watery stools with no traces of occult or frank blood, 6-8 pus cells and no macrophages
- Urine Examination: Normal

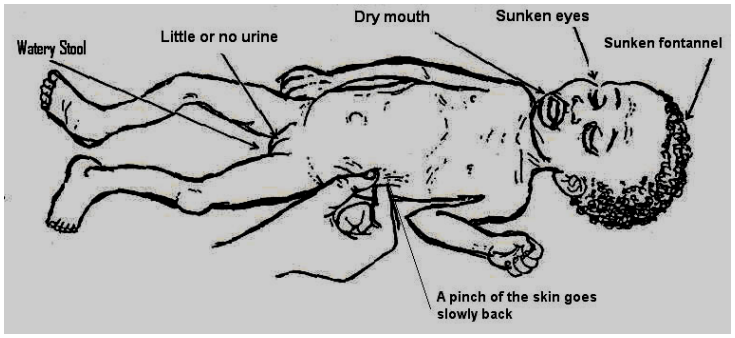
Clinical Diagnosis

Acute gastroenteritis

Management

Since the child was moderately dehydrated he was administered a commercially available WHO oral rehydration salt (ORS) solution. She was also asked to continue feeding him normal diet and give paracetamol if fever was present. She was asked to come with the child for follow-up in the evening. On repeat examination it was found that the child was well, able to take feeds, had only 2 diarrheal episodes, vomiting had stopped and there was no fever. The mother was asked to continue with the ORS and prescribed zinc supplement ((20 mg/ kg /day for 14 days). There was a marked improvement in stool consistency by day 3. Rehydration therapy was now stopped and zinc supplement was continued.

Discussion



Acute gastroenteritis (AGE) is a commonly occurring clinical problem in children. It is a largely self-limited disease with many etiologies. The evaluation of the child with acute gastroenteritis requires a careful history and a complete physical examination to uncover other illnesses with similar presentations. Minimal laboratory testing is generally required. Treatment is primarily supportive and is directed at preventing or treating dehydration. When possible, an age-appropriate diet and fluids should be continued. Oral rehydration therapy using a commercial pediatric oral rehydration solution is the preferred approach to mild or moderate dehydration. Severe dehydration requires the prompt restoration of intravascular volume through the intravenous administration of fluids followed by oral rehydration therapy. Antiemetic and antidiarrheal medications are generally not indicated and may contribute to complications. Diarrhea in children should not be treated with opiate-anticholinergic combinations or opiates other than loperamide because of the high potential for toxic side effects. The use of antibiotics is usually not recommended unless an infective etiology is suspected. Although treatment may shorten the course of some diarrheal illnesses (e.g., Shigella or traveler's diarrhea), most bacterial diarrheas are self-limited and will be resolving before the causative organism is identified.

Clinical message

- ∇ AGE is a common occurrence in children
- ∇ Most common etiology is viral
- ∇ Assess the degree of dehydration and acidosis and provide rapid resuscitation and rehydration with oral or intravenous fluids as required
- ∇ Majority of the cases can be managed by adequate rehydration using standard ORS
- ∇ Use of antibiotics is usually not recommended unless an infective etiology is suspected.