

**FLUID AND ELECTROLYTE DISTURBANCE**
**FLUID AND ELECTROLYTE  
DISTURBANCES IN CHILDHOOD  
DIARRHEAL DISEASES**

**\*Sadagopan Srinivasan**

**\*\*Rangan Srinivasaraghavan**

**Abstract:** *Acute gastroenteritis (AGE) is the most common illness leading to dehydration in children, especially in developing nations. It is often associated with fluid and electrolyte disturbances, which is responsible for the morbidity and mortality associated with diarrheal diseases. The disease severity depends on the degree of dehydration. Correct assessment of severity of dehydration and identification of underlying electrolyte imbalance is an essential step in management plan. Most of these children can be successfully treated by timely use of oral rehydration solution. This review focuses on the pathophysiology and management of the fluid and the common electrolyte disturbances associated with childhood diarrheal diseases.*

**Keywords:** *Diarrhea, Fluid and electrolyte balance, Child, Fluid therapy.*

**Points to Remember**

- *Classifying diarrhea based on timing and content is clinically more useful for deciding on the management.*
- *Four clinical types are commonly seen- acute watery diarrhea lasting several hours to days, acute bloody diarrhea, prolonged diarrhea lasting more than a week and diarrhea in the setting of undernutrition.*
- *Severe dehydration and sodium imbalance are common complications associated with diarrhea.*
- *Osmolality disturbances need to be considered while giving treatment for the associated sodium imbalance conditions.*
- *Children who are at higher risk of complications due to diarrhea are- infants <1 year, children with underlying severe acute malnutrition, repeated vomiting/ refusal to accept oral feeds, and children with poor sensorium.*
- *The two pillars of management in AGE are immediate attempts at oral rehydration and rapid reintroduction of regular feeding following initial fluid rehydration.*
- *Green banana diet has been found to hasten recovery from acute and prolonged diarrhea and may be a useful adjunct therapy in resource limited settings.*

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\* Retired Director Professor and Head,  
Department of Pediatrics,  
Jawaharlal Institute of Postgraduate Medical Education  
and Research, Puducherry.

\*\* Assistant Professor,  
Department of Pediatrics,  
Mahatma Gandhi Medical College and  
Research Institute, Puducherry.  
email: srinivasan.sgopan@gmail.com

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