

FLUID AND ELECTROLYTE DISTURBANCE**FLUID AND ELECTROLYTE
MANAGEMENT IN DIABETIC
KETOACIDOSIS*** **Vijai Williams**** **Jayashree M**

Abstract: Diabetic ketoacidosis (DKA) is a preventable but serious complication of type 1 diabetes and carries a mortality rate of 0.3-0.5% in developed economies and much higher in developing economies (about 10%). New onset diabetes presenting for the first time as DKA is quite common in children. The diagnosis in these children is not always apparent and requires a high index of suspicion. Immediate treatment includes adequate intravenous fluids, parenteral insulin and careful clinical and biochemical monitoring. Pediatricians in resource limited settings encounter a higher incidence of complicated DKA due to delayed presentations, poor compliance to therapy and higher co morbidities like malnutrition and sepsis. These warrant modifications in established international guidelines to avoid over as well as under treatment with respect to fluids and insulin. In our settings children with DKA should preferably be managed by a specialist multidisciplinary team during and after an episode. Since parents play a key role in the day to day management, emphasis should be on sustained patient/parent education to avoid recurrence.

Keywords: Diabetic ketoacidosis, Children, Fluids, Electrolytes, Insulin therapy

Points to Remember

- *The features of DKA are attributable to the osmotic effects of high blood glucose and loss of body fluid.*
- *Correcting the dehydration by appropriate IV fluid, arresting the ketogenesis by insulin therapy and treating the precipitating cause(s) forms the basis of treatment in DKA.*
- *Correct dose, rate, technique and duration of insulin infusion is a must.*
- *Anticipating electrolyte abnormalities and treating them as and when it occurs is essential.*
- *Managing a child with DKA needs to be in the intensive care unit with a good lab support.*

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