Chapter 9

MANAGEMENT OF DIABETIC KETACIDOSIS IN THE EMERGENCY DEPARTMENT

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Introduction

Diabetic ketoacidosis (DKA) is generally seen as a complication of patients with type 1 diabetes. It is a fatal disease that can also be seen in patients with type 2 diabetes or those with gestational diabetes. Most children with type 1 diabetes have DKA at first is a clinical finding. DKA may be the first sign of the disease in 20-25% of adult patients with type 1 diabetes (1).

Precipitating factors

The main risk factors that can lead to the development of DKA are outlined as follows:

- Newly Diagnosed Type 1 Diabetes: Approximately 20-25% of DKA cases occur in individuals with newly diagnosed type 1 diabetes. The absence of endogenous insulin secretion renders them vulnerable to metabolic derangements, leading to the onset of DKA
- Infections, including respiratory, urinary tract, and gastrointestinal infections, are common triggers for DKA. The inflammatory response associated with infections induces insulin resistance and gluconeogenesis, exacerbating hyperglycemia
- Errors in Insulin Therapy: Suboptimal insulin administration practices contribute significantly to DKA episodes. This includes insulin interruption, dose skipping, inadequate dosages, and the inadvertent use of expired insulin. The rise in blood glucose levels further promotes ketogenesis. Mistakes made during diet
- Cerebrovascular event
- Alcohol, cocaine use

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