PRECIPITANTS OF DKA

IM A DIP DIP

Infection

Pneumonia

UTI

Septicemia

Cellulitis

Periodontal

CNS

Metabolic

Hypothyroidism Cushing's syndrome Uremia

Alcohol consumption

Dietary indiscretion

Insulin not taken

Pregnancy

Drugs

Thiazides

Infarct

MI

Stroke

Pancreatitis

Diagnostic criteria

Hyperglycaemic crises in adult patients with diabetes: a consensus statement from the American Diabetes Association [14]

Plasma glucose

- >250 mg/dL (>13.9 mmol/L) in diabetic ketoacidosis (DKA)
- >600 mg/dL (>33.3 mmol/L) in hyperosmolar hyperglycaemic state (HHS).

Arterial pH

- 7.25 to 7.3 in mild DKA
- 7.00 to <7.24 in moderate DKA
- <7.00 in severe DKA
- >7.30 in HHS.

Serum bicarbonate

- 15 to 18 mEq/L (15 to 18 mmol/L) in mild DKA
- 10 to 15 mEq/L (10 to 15 mmol/L) in moderate DKA
- <10 mEq/L (<10 mmol/L) in severe DKA
- >18 mEq/L (>18 mmol/L) in HHS.

Urine and serum ketones

- + in DKA
- small in HHS.

Effective serum osmolality

- variable in DKA
- >320 mOsm/kg (320 mmol/kg) in HHS.

Anion gap

- >10 mEq/L (>10 mmol/L) in mild DKA
- >12 mEq/L (>12 mmol/L) in moderate and severe DKA
- <12 mEq/L (<12 mmol/L) in HHS.

Mental status

- alert in mild DKA
- alert/drowsy in moderate DKA
- stupor/coma in severe DKA and HHS. [11] [13] [14]

The most widely used diagnostic criteria for DKA are plasma glucose >250 mg/dL (>13.9 mmol/L) and arterial pH <7.3 and presence of ketonaemia and/or ketonuria. The diagnostic features of HHS are plasma glucose >600 mg/dL (>33.3 mmol/L), serum total osmolality >330 mOsm/kg (>330 mmol/kg), and absence of severe ketoacidosis. However, severity of DKA or the required number of criteria for diagnosis have not been officially stated, and the above-mentioned classification has been based heavily on prospective studies of DKA and HHS. [1] [13] [14]