

DIABETIC KETOACIDOSIS

PATHOPHYSIOLOGY

Severe insulin deficiency typically associated with type I diabetes, where the body is starved for glucose and breaks down fat for energy, leaving the body in a state of ketosis/acidosis. Along with the lack of pH balance and ability to transport potassium across the cell membrane, the body will have a major electrolyte imbalances and creates a gap between the ions called the anion gap. Having electrolyte imbalances, blood pH acidity, and an inefficient system for getting energy, the body doesn't function normally. Patients usually are altered mentally and have N/V/D.

ASSESSMENT FINDINGS

Assess glucose, along with electrolytes, lactic acid and blood pH. Assess neuro status, check urine for ketones, patients breath will be fruity. Assess respirations (Kussmaul's respirations), check kidney functioning (BUN and creatinine)

DIAGNOSTICS

- POC glucose
- Positive lactic acid
- A wide anion gap
- Ketones in the urine,
- Acidic blood pH

NURSING PRIORITIES

- Prevent shock
- Assess and monitor mental status
- Promote optimal acid-base balance

THERAPEUTIC MANAGEMENT

- Treat dehydration
- Start insulin
- Monitor electrolytes and replace or deplete as necessary
- Monitor neuro status frequently as well as frequent POC glucose

MEDICATION THERAPY

- Insulin and IV fluids.
- If hyperkalemic give kayexalate and calcium gluconate.
- Later potential hypokalemia may occur give IV potassium