

- It takes emotional intelligence to know the right time to leave the room.
- Don't let the family get between you and the door. Grief can take a lot of different forms.
- Let them know when your shift ends and that they can contact you with any questions they may have.
- Providers also need self-care. This is hard to do.
- When calling a code, ask the teams if anyone has any other ideas.
- Honor the deceased patient as a team when the code is called.

**References:**

[SPIKES—A six-step protocol for delivering bad news: application to the patient with cancer](#)  
Baile WF, Buckman R, Lenzi R et al. [Oncologist. 2000;5\(4\):302-311 PMID: 10964998.](#)

## Alcoholic Ketoacidosis

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- Definition: Alcohol ketoacidosis (AKA) is a syndrome of alcohol use and ketoacidosis.
- Alcohol + poor nutrition + dehydration with some stressor = alcohol ketoacidosis.

### PEARLS

- **Major Pearl:** Must determine and treat the underlying stressor.
  - Most common precipitants include infection and pancreatitis.
  - Any condition that may reduce oral intake can result in alcohol ketoacidosis: intra-abdominal pathology (eg, cholecystitis, appendicitis, obstruction, perforation, mesenteric ischemia), alcohol withdrawal, diabetic ketoacidosis, and other toxic ingestion (eg, salicylate toxicity).
- Presentation:
  - Alcohol ketoacidosis is most common in those with chronic alcohol use but may occur in those with binge drinking.
  - Symptoms include: nausea (75%), vomiting (75%), abdominal pain (40%-75%), diffuse abdominal pain (75%).
  - Beware of abnormal bowel sounds, abdominal distension, and rebound tenderness. These suggest another intra-abdominal condition.
  - Patients usually have normal mental status but may have mild alteration. Severe altered mental status suggests another condition.

- Must always consider Wernicke encephalopathy in these patients (<https://www.emrap.org/episode/endocrine1/wernicke>).
- Evaluation:
  - Primary findings: anion gap metabolic acidosis, ketosis, and/or lactate elevation.
  - Clinicians need to consider other conditions with ketoacidosis and an elevated anion gap metabolic acidosis:
    - Mixed acid-base conditions are common; isolated anion gap metabolic acidosis is present in <25% of cases.
    - Ethylene glycol and methanol toxicity cause severe anion gap lactic acidosis (serum bicarbonate <10 mEq/L, pH <7, lactate >4 mmol/L) or elevated osmolal gap, altered mental status, and severe end-organ injury.
  - Patients with alcohol ketoacidosis have classically low serum alcohol levels, but this is not reliable.
    - One study suggests over 80% have elevations >100 mg/dL.
  - Serum glucose is most commonly low or normal:
    - Approximately 10% have levels <60 mg/dL
    - Approximately 11% have hyperglycemia, typically <275 mg/dL; if >250 mg/dL, consider hyperglycemic emergency
  - Electrolyte abnormalities include hyponatremia, hypophosphatemia, or hypokalemia.
- Management:
  - Treat any underlying stressors.
    - Such as hypothermia, rhabdomyolysis, pancreatitis, infection, seizure, delirium tremens, myocardial infarction, intra-abdominal pathology, pulmonary embolism.
  - Administer fluid resuscitation, replenish glucose and electrolytes, and provide symptomatic therapy (antiemetics).
    - Balanced fluids may reduce the risk of developing hyperchloremic non-anion gap metabolic acidosis.
    - Use isotonic fluid containing dextrose for hyponatremia.
  - Dextrose is an essential component of therapy: it replenishes serum glucose, increases insulin secretion, and decreases glucagon secretion, which reduces ketoacidosis and improves pH.
    - If glucose <60 mg/dL, give dextrose 50% 50 mL or dextrose 10% 100-250 mL.
    - If glucose is not severely decreased, assess potassium first; replenishing glucose can result in insulin secretion and cause hypokalemia.
    - In patients who are normoglycemic or mildly hypoglycemic with a potassium  $\geq 3.5$  mEq/L, dextrose 5% should be administered after initial fluid resuscitation.

- Hyperglycemia → insulin infusion.
- Replenish electrolytes and thiamine (200 mg intravenously or 500 mg if Wernicke encephalopathy likely).
- Once improved, offer addiction support services.
- Patients with resolution of ketoacidosis and electrolyte abnormalities, improving volume status, and with the ability to tolerate oral fluids may be discharged with follow-up.
- Patients who are not able to tolerate oral fluids and have continued hemodynamic changes or unresolved ketoacidosis should be admitted to a monitored setting.

**References:**

[CorePendium: Alcoholic Ketoacidosis](#)

## EMA Ultra Ultra August Summary

Mel Herbert

- Abstract 1: [Nasal High-Flow Therapy During Neonatal Intubation](#)
- Abstract 3: [VL Screen Visualization and Tracheal Intubation Performance](#)
- Abstract 4: [Oral factor XIa inhibitor Asundexian in A-Fib \(PACIFIC-AF\)](#)
- Abstract 5: [Ketamine with Haloperidol vs Fentanyl on Pain Reduction in the ED](#)
- Abstract 6: [Is Height of Fever Associated with Serious Bacterial Infection?](#)
- Abstract 12: [Usefulness of Contrast-Enhanced Multi-Detector CT in Upper GIB](#)
- Abstract 13: [IM vs IA Glucocorticoid Injection for Knee Osteoarthritis: KIS RCT](#)
- Abstract 16: [Nonoperative or Surgical Treatment of Achilles' Tendon Rupture](#)