

Metabolic Acidosis Interventions

Metabolic acidosis is a clinical disturbance leading to increased plasma acidity.

Often this is due to underlying disease, so it is important to normalize plasma pH along with guiding treatment to the underlying cause. Patients should be continuously monitored while receiving treatment to see if therapy is effective, and caregivers should follow ABG's to appropriately observe the patient's status.



PLAY PICMONIC

Interventions

Raise Plasma pH > 7.20

Up-arrow Plasma-TV pH-strip > Lucky (7) Slot-machine . (2) Tutu

The primary goal of therapy is to return the patient's plasma pH to a normal value, and it should acutely be raised above 7.20. A pH this low is concerning because ill patients may not be able to adequately compensate, so quick treatment is necessary.

Treat Underlying Cause

Treating Underlying Attacker

It is important to treat the underlying cause leading to metabolic acidosis, as this will help normalize the plasma pH. Patients with kidney diseases require bicarbonate and potassium, while those in DKA need insulin and hydration. Those in lactic acidosis need bicarbonate, and reversal agents are necessary in cases of ethanol or methanol poisoning.

Sodium Bicarbonate

Salt-shaker with Bi-car-bombs

If sodium bicarbonate levels are extremely low, bicarbonate is given as a temporary method of treatment. Typically, treating the underlying disorder helps alleviate metabolic acidosis, but if the patient isn't normalizing quickly enough, or if the etiology is unknown, sodium bicarbonate is a temporary treatment modality.

Considerations

Follow ABGs

Following AirBaG

The best method to track a patient's responsiveness to treatment when they have metabolic acidosis is to obtain serial arterial blood gases (ABG's). This allows the provider to track the patient's pH, PaCO2, and PaO2, helping to distinguish if the condition is improving, and if the patient is adequately compensating.

Continuously Monitor Patient

Infinity Monitor

It is important to continuously monitor the patient and their vital signs to see if they are responsive to treatment. Often, when the patient is hospitalized, their status can get worse, and acidosis can progress.