

# Lactic Acidosis

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## Signs & Symptoms:

- Generally acute in onset
- Nausea, vomiting, diarrhea, hyperventilation
- Hypotension, hypovolemia, confusion & coma may also occur
- Death is usually secondary to cardiovascular collapse

## Lab Findings:

- Low  $\text{HCO}_3^-$ , low  $\text{PCO}_2$ , low arterial pH
- Elevated  $\text{K}^+$ , normal or decreased  $\text{Cl}^-$
- Elevated lactate and pyruvate
- Anion gap  $\geq 30$  mEq/L

## Treatment:

- Empiric
- Correct underlying cause of anoxia
- Eliminate factors predisposing to lactic acidosis
- Large doses of sodium bicarbonate with frequent pH measures
- Hemodialysis
- glucose plus insulin

## Prevention:

- Do not use metformin in patients being treated for CHF
- Do not initiate metformin in patients  $> 80$  years old unless  $\text{ClCr}$  shows normal renal function
- Do not use metformin in patients who are septic
- Do not exceed doses of metformin  $> 2.5$  g/day
- Discontinue metformin if  $\text{ClCr} < 30$  ml/min  
Use with caution if  $\text{ClCr} 30-50$  ml/min