Rhabdomyolysis

REFRESHER

RECOGNIZE IT

- Damaged muscle releases myoglobin into the bloodstream
- Can lead to kidney failure, dangerous electrolyte imbalances, and shock
- Releases potassium and enzymes, causing arrhythmias, acute kidney injury, compartment syndrome
- Trauma causes: polytrauma, prolonged immobilization, abuse, high-voltage shock, strenuous exercise
- Medical causes: alcohol, CO, cocaine, diuretics, statins; MRSA, sepsis, toxic shock, influenza
- Also: hypokalemia, hypocalcemia, dehydration; DKA, HHS; venom — insect, snake, mushroom
- Most common: trauma, immobilization, sepsis, cardiovascular surgeries

ACT — FIRST MOVES

1. Watch the EKG — treat changes per the specific cardiac rhythm protocol
2. Albuterol helps lower serum potassium by optimizing the sodium-potassium pump

PEARLS

- Falls in the elderly are concerning, especially after long immobility
- Age-related kidney damage, alcohol use, and medications raise risk of rhabdomyolysis and AKI

ASSESS

- History: crush injuries; falls with extended periods in one position
- Exam: look for areas of prolonged pressure and signs of poor circulation
- The 6 Ps: pain, pressure, paresthesia, paralysis, pallor, perfusion compromise
- Symptom triad and signs: muscle pain, weakness, dark urine
- Also malaise, fever, tachycardia, nausea/vomiting, abdominal pain

Take Home Message:

Think rhabdomyolysis after crush, long immobility, or sepsis — muscle breakdown threatens kidneys, potassium, and rhythm.