ARTICLE 999

Rhabdomyolysis

8 KEY POINTS

1 PRESENTATION

‘it is a triad of myalgia, myoglobinuria (tea-colored urine), and weakness.’ - But ‘less than 10% present with classic symptoms’.

2 DIAGNOSIS

‘Elevated CPK is the most sensitive laboratory test for the evaluation of muscle injury.’ - But this does not correlate ‘with the severity of muscle damage and renal failure’

3 TREATMENT

Is supportive, with proper hydration. ‘Delay in fluid resuscitation may cause worsening hypovolemia secondary to third spacing.’

‘Potassium-containing IV fluids like Ringer's lactate are generally avoided.’

4 CAUSES - NON-TRAUMATIC

‘Seizures, alcohol use, drugs, and prolonged bedridden state’; a main feature is a ’mismatch between oxygen supply and demand, electrolyte changes, and metabolic abnormalities.’

In children, infection is the most common cause.

5 CAUSES - TRAUMATIC

In major trauma, ’crush syndrome from accidents, earthquakes, and other natural and manufactured disasters.’ Can also occur in limb fractures, sepsis, and many other causes.

6 PROGNOSIS

‘Children are at low risk for crush syndrome and have better mortality compared to adults.’ - But ‘rhabdomyolysis from traumatic causes has a poor prognosis when compared to non-traumatic.’

7 PROGNOSIS - WITH ‘COMMON COMPLICATION’ (AKI)

‘Even without acute kidney injury, the mortality rate is about 20%, and with kidney injury, mortality is about 50%.’

8 TRAUMATIC CAUSE + AKI TREATMENT

‘6 to 10% of patients with crush syndrome with acute kidney injury in survivors of the Bam earthquake in Iran required hemodialysis’

Reference:
Stanley M, Chippa V, Aeddula NR, et al. Rhabdomyolysis. [Updated 2023 Apr 16]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2024 Jan-. Available from: https://www.ncbi.nlm.nih.gov/books/NBK448168/