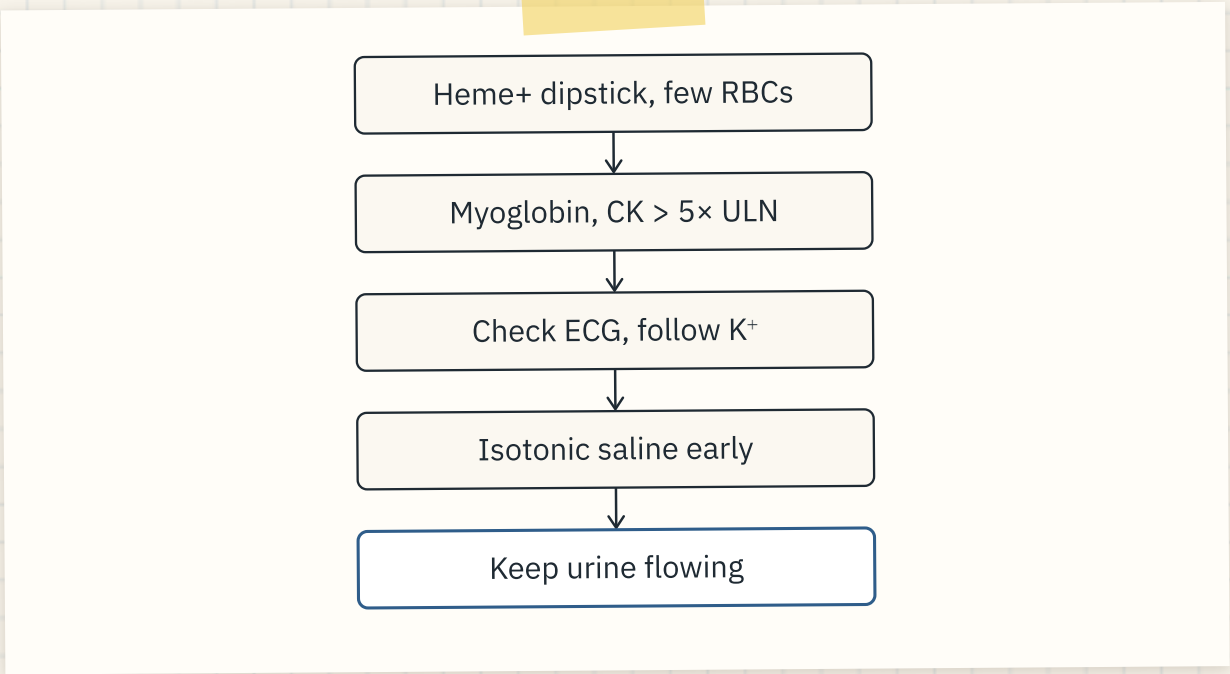
Rhabdomyolysis: CK, kidney, fluids

Recognise it, then protect the kidney



Step by step

1. Spot CK above 5 × upper limit of normal
2. Dipstick heme+ with few RBCs: myoglobin
3. Check an ECG and follow potassium
4. Calcium only for symptoms or hyperkalaemia with ECG changes
5. Start isotonic fluids early, keep urine flowing

Finding	Action
Heme+ dipstick, few RBCs	Think myoglobin
Potassium rises	ECG, follow K^+ closely
Calcium falls	No calcium for low Ca^{2+} alone
Kidney at risk	Isotonic fluids early
Bicarbonate, mannitol	Not routine

What spills out, and what to do

DEFINITION

CK > 5 × upper limit of normal

if the upper limit is 200 U/L, then 5 × 200 = 1,000 U/L

Rule of thumb

Positive blood, no red cells: think myoglobin

Fluids first; calcium only for symptoms or ECG changes

Kidney: volume, casts, acidic urine

Exam traps

- Do not treat low calcium alone with calcium.
- FENa can look prerenal in pigment injury.
- Fluid type, volume and timing are not proven in trials.

Rhabdomyolysis: CK, myoglobinuria and kidney injury

Video, written lesson, practice question and sources: medservatory.com/usmle-step-2-ck/nephrology-electrolytes/rhabdomyolysis-ck-myoglobinuria-aki

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