

# A Case of Rhabdomyolysis with Rigors

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**Introduction:** Rhabdomyolysis is a potential life-threatening condition caused by extensive skeletal muscle breakdown with leakage of toxic muscle contents into the circulation. The most dreaded complication is acute renal failure caused by toxic effects of myoglobin in the kidneys. The causes of rhabdomyolysis are classified into traumatic, non-traumatic exertional, and non-traumatic rhabdomyolysis. The pathophysiologic hallmark of rhabdomyolysis regardless of etiology is increased free ionized calcium due to cellular energy depletion (ATP) or direct plasma membrane rupture and consequent intensified muscle contractility, mitochondrial dysfunction, and production of oxygen radicals.

**Case Report:** We report a case of a middle-aged black woman with rhabdomyolysis that was caused by intense shivering chills, and rigor from pneumonitis. She had no personal or family history of muscle disorder and was admitted to the hospital after a weeklong history of upper and lower respiratory symptoms that led to the worse shivering and shaking chills she ever had. She was noted to have elevated creatine phosphokinase (CPK) of 200,000 uL (26–192 uL) and creatinine level of 5.52 (0.81–1.2 mg/dL). She was started on intravenous fluid with half-isotonic saline (0.45%) or 77 mmol/L sodium, 75 mmol/L sodium bicarbonate, and hemodialysis with progressive improvement in kidney function that took up to seven weeks to full recovery.

**Conclusion:** Shivering and shaking chills from respiratory infection can cause rhabdomyolysis with severe muscle damage and renal failure in a patient with no known underlying muscular-skeletal disorder condition but has good recovery with fluid management and hemodialysis. Renal function has returned back to normal.