Seizures

REFRESHER

RECOGNIZE IT

- Excessive, chaotic discharge of cerebral neurons — seconds to a few minutes: convulsions, LOC, blank staring, lip smacking, jerking
- Generalized motor: tonic-clonic (stiffening, then jerking, 1–3 min), myoclonic (quick jolts, can cluster), atonic (limpness, slumping)
- Generalized non-motor: absence — staring without moving, 10–20 seconds. Partial: simple (awake, one body part) vs complex (not fully alert)
- Status epilepticus: 5 continuous minutes of generalized activity, or 2+ seizures with no return to baseline
- Postictal period: confusion, exhaustion, temporary memory loss, lasting several minutes

ASSESS

- History: reported/witnessed activity, previous seizure history, medical alert tag, seizure medications, trauma, diabetes, pregnancy
- Time of onset, number of seizures, alcohol use/abuse or abrupt cessation, fever
- Signs: decreased mental status, sleepiness, incontinence, observed activity, evidence of trauma, unconsciousness
- Differential: CNS trauma, tumor, metabolic/hepatic/renal failure, hypoxia, electrolytes, drugs or medication non-compliance, infection/fever, eclampsia, stroke, hyperthermia, hypoglycemia

ACT — FIRST MOVES

1. Not actively seizing: work the postictal assessment and the cause list
2. Actively seizing: check glucose, and treat abnormal glucose
3. Midazolam: IN 5 mg, or IV 2–5 mg
4. Eclampsia: magnesium sulfate 4 g IM or slow IV over 5 minutes

PEARLS

- If the patient requires intubation, you still need to treat the seizures
- Rocuronium paralyzed the muscles — but the brain is still seizing
- Causes to hunt: known seizure disorder, metabolic disturbance, non-compliance, stress, lack of sleep, caffeine (acute list also: stroke, tumor, hypoxia, infection, toxicologic, alcohol withdrawal)

Take Home Message:

Five minutes is status: check glucose, give midazolam, and remember paralysis stops the shaking — not the seizure.