



NGN NCLEX • 2026

PEDIATRIC FOCUS

PEDIATRIC SEIZURES

High-Yield Rapid Review • Assessment • Interventions • Safety • Meds • Family Education



WHAT IS A SEIZURE?

A **sudden, uncontrolled electrical disturbance** in the brain causing changes in behavior, movement, sensation, or consciousness. In children, causes include **fever, epilepsy, trauma, infection (meningitis), electrolyte imbalance** ($\downarrow \text{Na}^+$, $\downarrow \text{glucose}$), or genetic disorders.

1 TYPES OF PEDIATRIC SEIZURES



Febrile

6 mo – 5 yr

Trigger: rapid $\uparrow$ temp ($\geq 38^\circ\text{C}/100.4^\circ\text{F}$). **Most common** seizure in children. Usually benign; genetic predisposition.



Tonic-Clonic

Any age

Tonic: stiffening, LOC. **Clonic:** rhythmic jerking. Tongue biting, incontinence, **postictal sleep/confusion**.



Absence (Petit Mal)

4 – 12 yr

Brief (5–30 sec) staring spells, blinking, no postictal. Often mistaken for **daydreaming/ADHD**. May occur 100+ $\times$ /day.



Infantile Spasms

3 – 12 mo

West syndrome. Sudden flexion/extension ("salaam" attacks). **EEG: hypsarrhythmia**. Medical emergency $\rightarrow$ refer!



Focal (Partial)

Any age

One hemisphere. **Simple:** awake. **Complex:** altered awareness, automatisms (lip smacking). May have **aura**.



Atonic / Myoclonic

Any age

Atonic: "drop attacks" — sudden tone loss (**helmet!**). **Myoclonic:** brief lightning jerks of muscle groups.

2 FEBRILE SEIZURE DEEP DIVE ★ VERY HIGH YIELD



Simple vs. Complex Febrile Seizure

✓ SIMPLE (typical)

- ▶ Duration **< 15 minutes**
- ▶ **Generalized** (whole body)
- ▶ **Only 1 seizure** in 24 hrs
- ▶ No neuro deficit after
- ▶ Low risk $\rightarrow$ reassurance

⚠ COMPLEX (red flags)

- ▶ Duration **> 15 minutes**
- ▶ **Focal** (one side)
- ▶ **≥ 2 seizures** in 24 hrs
- ▶ Postictal deficit (Todd paralysis)
- ▶ Workup: labs, LP, imaging

3 NURSING PRIORITIES: DURING & AFTER



DURING THE SEIZURE

- ✓ **SAFETY FIRST** — stay with child, call for help
- ✓ Place child on **SIDE** (lateral) — prevent aspiration
- ✓ Protect head with soft item; **clear area** of hard objects
- ✓ Loosen tight clothing around neck
- ✓ **TIME** the seizure; note type & behavior
- ✓ Suction PRN; apply O_2 if available
- ✓ Maintain IV access for emergency meds



AFTER (POSTICTAL)

- ✓ Maintain **SIDE-LYING** recovery position
- ✓ Assess **ABCs** $\rightarrow$ airway, breathing, circulation
- ✓ VS + pulse ox + neuro/LOC check
- ✓ Expect drowsiness, confusion, $\downarrow$ LOC — allow rest
- ✓ Orient gently, reassure child and family
- ✓ **Document:** onset, duration, movements, postictal
- ✓ Check for injury, incontinence, tongue trauma

4 DO'S & DON'TS (BOARDS LOVE THESE!)



DO

- Turn child to **side** to prevent aspiration
- Protect the **head** with padding
- **Time** the seizure & describe movements
- Stay calm; stay with the child
- Loosen restrictive clothing



DON'T

- ✗ **Never restrain** the child's movements
- ✗ **Nothing in the mouth** (no bite blocks!)
- ✗ Do not give **food/fluids** during or immediately after
- ✗ Do not leave the child unattended
- ✗ Don't move child unless in danger

5 STATUS EPILEPTICUS — EMERGENCY!



STATUS EPILEPTICUS

Seizure **> 5 minutes** OR repeated seizures without return to baseline. $\rightarrow$ Airway, O_2 , IV, glucose check, **STOP** the seizure!

1ST LINE

Lorazepam

IV (Ativan)

ALT / NO IV

Diazepam

IV or rectal

2ND LINE

Fosphenytoin

or Levetiracetam

6 LONG-TERM ANTISEIZURE MEDS — WATCH FOR!

Levetiracetam

(Keppra)

Mood/behavior changes, irritability, agitation. Few drug interactions.

Valproic Acid

(Depakote / Depakene)

Hepatotoxicity, pancreatitis, **teratogenic** (neural tube defects). Monitor LFTs.

Phenytoin

(Dilantin)

Gingival hyperplasia (oral care!), ataxia, therapeutic level **10–20 mcg/mL**.

Carbamazepine

(Tegretol)

Agranulocytosis, SJS (esp. HLA-B*1502+), monitor CBC.

Lamotrigine

(Lamictal)

Stevens-Johnson Syndrome — stop at first rash! Titrate slowly.

Phenobarbital

(neonatal 1st line)

Sedation, **paradoxical hyperactivity** in kids, respiratory depression.

7 FAMILY & CHILD EDUCATION



Empower the Family

- ★ Never stop antiseizure meds abruptly
- ★ No unsupervised swimming or bathing
- ★ Keep a seizure diary — triggers & duration
- ★ Treat fever early (acetaminophen) in febrile kids
- ★ School plan / 504 — inform teachers & nurse
- ★ Medical ID bracelet at all times
- ★ Helmet for bikes, skating, or atonic type
- ★ Avoid triggers: sleep loss, stress, flashing lights
- ★ Ketogenic diet may be used for refractory cases
- ★ Driving restrictions for teens per state law

8 WHEN TO CALL 911 / GO TO THE ED



EMERGENCY CRITERIA

- ☎ Seizure lasts **> 5 minutes**
- ☎ Repeated seizures without recovery
- ☎ Injury during seizure (head trauma)
- ☎ Known pregnancy or diabetes
- ☎ **First-ever seizure**
- ☎ **Difficulty breathing** or cyanosis after
- ☎ Seizure in **water** / suspected aspiration
- ☎ Does not return to baseline within ~ 1 hr

9 NGN NCLEX TEST-TAKING STRATEGY

NGN NCLEX TIP

CLINICAL JUDGMENT FOCUS: Peds seizure items often use **Bowtie, Drag-and-Drop, Matrix, and Highlight** formats. Always prioritize **airway & safety first** — side-lying position beats "call provider" every time during an active seizure.

KEY DECISION POINTS: (1) Is it *febrile* simple vs. complex? (2) Is this *status epilepticus*? (3) Which *medication adverse effect* is this? (4) What is the *priority nursing action*?

SIDE-LYING = #1

TIME IT

NOTHING IN MOUTH

NEVER RESTRAIN

>5 MIN = STATUS

ABC $\rightarrow$ THEN MEDS