

DIANE'S NGN NCLEX 2026 VISUAL STUDY LIBRARY · NEUROLOGICAL CLUSTER

Right vs Left Side Stroke

Nursing Care & Patient Teaching

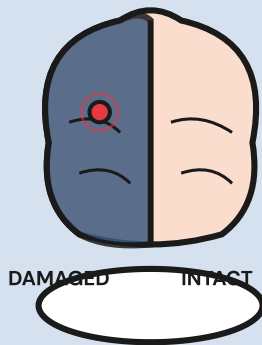
NEUROLOGICAL / CVA

HIGH-YIELD · TEST PLAN 2026

 **Source disclosure:** This topic was not present in Diane's uploaded reference notes. Content drawn from standard NGN NCLEX 2026 references (Saunders Comprehensive Review, ATI RN Adult Medical-Surgical, Lippincott NCLEX-RN, AHA/ASA 2024 Stroke Guidelines).

Left Brain Stroke

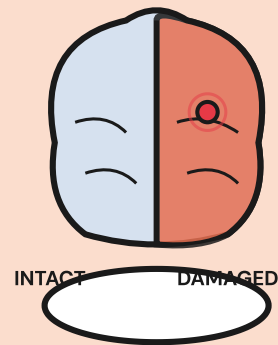
CONTROLS THE RIGHT SIDE OF BODY



Right-Sided Weakness →

Right Brain Stroke

CONTROLS THE LEFT SIDE OF BODY



← Left-Sided Weakness



Definition & Overview

WHAT IS A STROKE (CVA / "BRAIN ATTACK")

A **stroke (Cerebrovascular Accident, CVA)** is a sudden interruption of cerebral blood flow that causes neurologic deficits. **Damage is CONTRALATERAL** — the side of the brain affected controls the **OPPOSITE** side of the body. Time is brain: **1.9 million neurons die every minute** a stroke goes untreated.

#5

LEADING CAUSE OF DEATH (US)

Stroke is a top-5 cause of death and the #1 cause of long-term adult disability.

4.5h

TPA WINDOW

IV alteplase must be given within 4.5 hours of symptom onset for ischemic stroke.

24h

TIA RESOLVES

A transient ischemic attack (TIA) is a warning — symptoms resolve within 24 hours (usually <1h).

~87% of strokes

Ischemic Stroke

A clot (thrombotic or embolic) blocks a cerebral artery.
Treat with tPA if within 4.5h and no contraindications.
Aspirin within 24–48h.

~13% of strokes

Hemorrhagic Stroke

A ruptured vessel bleeds into brain tissue (intracerebral) or subarachnoid space. **tPA is CONTRAINDICATED.**
Control BP, manage ICP.

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Pathophysiology

STEP-BY-STEP MECHANISM OF INJURY

STEP 1

Vessel Event

Artery occluded (clot) or ruptured (bleed).



STEP 2

Loss of Perfusion

Brain tissue is deprived of O₂ & glucose.



STEP 3

Ischemic Cascade

Neurons depolarize, release glutamate → cell death.



STEP 4

Cerebral Edema

Swelling raises ICP, compresses healthy tissue.



STEP 5

Contralateral Deficit

Opposite-side motor, sensory, or cognitive loss.



KEY PRINCIPLE: The brain crosses over — **RIGHT** brain damage = **LEFT** body weakness, and **LEFT** brain damage = **RIGHT** body weakness. The language centers (Broca & Wernicke) live in the **LEFT** hemisphere in >95% of right-handed people.

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Signs & Symptoms: Right vs Left

THE MOST HEAVILY TESTED COMPARISON ON NCLEX



Left Brain Stroke

RIGHT-SIDED BODY DEFICITS

- **Right hemiplegia / hemiparesis** (weakness on right side)
- **Aphasia** — expressive (Broca's), receptive (Wernicke's), or global
- **Dysarthria** — slurred speech
- **Agraphia** (can't write), **Alexia** (can't read), **Acalculia** (can't do math)
- **Slow, cautious, anxious** personality change



Right Brain Stroke

LEFT-SIDED BODY DEFICITS

- **Left hemiplegia / hemiparesis** (weakness on left side)
- **Spatial-perceptual deficits** (can't judge distance, depth)
- **Unilateral neglect** — ignores left side of body & environment
- **Anosognosia** — denies the deficit exists ("My arm is fine")

- **Aware of deficits** → depression, frustration, easily upset
- Right visual field loss (right homonymous hemianopsia)
- Memory deficits related to **language**

- **Impulsive, quick, poor judgment** — HIGH FALL RISK 🚨
- **Unaware of deficits** → overestimates ability
- Left visual field loss (left homonymous hemianopsia)
- Memory deficits related to **performance/spatial**

🚨 **RED FLAGS — Call Rapid Response:** Sudden severe headache ("worst of my life" = hemorrhagic), unequal pupils, decreased LOC, projectile vomiting, seizure, Cushing's triad (↑BP, ↓HR, irregular respirations = ↑ICP).

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Priority Nursing Interventions

ABC-BASED + SIDE-SPECIFIC CARE

A — Airway

B — Breathing

C — Circulation

**D — Disability
(Neuro)**

E — Environment

⚡ Universal Acute Stroke Priorities (Both Sides)

- **Assess airway & swallow** — NPO until swallow screen passes (aspiration risk).
- **HOB 30°** (improves venous drainage, reduces ICP) unless hypotensive.
- **Neuro checks q1h** initially using NIHSS; monitor LOC, pupils, motor strength.
- **BP management:** Ischemic — permissive HTN up to 220/120 if no tPA; tPA candidates <185/110. Hemorrhagic — keep SBP <140.
- **Seizure precautions**, fall precautions, DVT prophylaxis (SCDs first; no anticoag in hemorrhagic).
- **Position affected extremity** in functional alignment; reposition q2h to prevent contractures & pressure injury.

📌 Left Brain Stroke Care

APPROACH FROM UNAFFECTED (LEFT) SIDE

- **Use simple, short phrases** — one-step directions.
- **Yes/no questions** & picture/communication boards for aphasia.
- **Allow extra time** for verbal responses — don't finish their sentences.
- **Do NOT shout** — hearing is intact; aphasia ≠ deafness.
- Refer to **speech-language pathology (SLP)** early.
- Address **depression/frustration** — patient is aware of losses.
- Place call light & objects on **LEFT (unaffected) side**.

📌 Right Brain Stroke Care

APPROACH FROM UNAFFECTED (RIGHT) SIDE

- **SAFETY is #1 priority** — impulsive behavior + denial of deficit = severe fall risk.
- **Bed alarm, side rails up, supervised ambulation, gait belt.**
- **Frequent reorientation** — to person, place, time, situation.
- Teach patient to **scan the environment** (turn head left) — for neglect.
- Use **mirrors** to help patient see & acknowledge the left side.
- Place objects on **RIGHT (unaffected) side** initially, then gradually toward left to retrain attention.

- Anticipate **slow, cautious** behavior — provide encouragement.

- **One-step instructions** — short attention span.
- Don't trust self-report of ability — **verify** before allowing activity.

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Pharmacology

STROKE-SPECIFIC MEDICATIONS & NURSING CONSIDERATIONS

Drug / Class	Use	Mechanism & Side Effects	Nursing Considerations
Alteplase (tPA) <i>Thrombolytic</i>	Acute ischemic stroke within 4.5h of onset	Dissolves clot. SE: intracranial hemorrhage, GI bleed, angioedema.	Verify onset time, confirm NON-hemorrhagic on CT. BP must be <185/110. NO anticoagulants/antiplatelets for 24h post. Monitor for bleeding.
Aspirin / Clopidogrel <i>Antiplatelet</i>	Ischemic stroke prevention & secondary prevention	Inhibits platelet aggregation. SE: GI bleed, bruising.	Give 24–48h after tPA. Hold if surgery/procedure. Teach bleeding precautions.
Warfarin / DOACs (apixaban, rivaroxaban) <i>Anticoagulant</i>	Cardioembolic stroke (e.g., A-fib)	Inhibit clotting cascade. SE: hemorrhage.	Warfarin: monitor INR (target 2–3). Vitamin K reverses. DOACs: no routine labs; andexanet/idarucizumab reverse.
Atorvastatin <i>Statin</i>	Lipid lowering, plaque stabilization	Inhibits HMG-CoA reductase. SE: myopathy, ↑ liver enzymes.	Monitor LFTs & CK. Teach to report muscle pain. Take in the evening.
Labetalol / Nicardipine <i>Antihypertensive</i>	Acute BP control (especially hemorrhagic)	β-blocker / CCB. SE: bradycardia, hypotension.	Titrate drip — monitor BP & HR continuously. Goal SBP <140 in hemorrhagic stroke.
Mannitol <i>Osmotic Diuretic</i>	↑ICP & cerebral edema	Pulls fluid from brain. SE: dehydration, electrolyte imbalance, pulmonary edema.	Use filter needle. Monitor serum osmolality, I&O, lung sounds, neuro status.
Nimodipine <i>CCB</i>	Prevent vasospasm in subarachnoid hemorrhage	Selective cerebral vasodilator. SE: hypotension.	Give PO/NG only — IV is fatal. Monitor BP closely.
Docusate / Stool softener	Prevent straining (↑ICP)	Softens stool. SE: rare.	Routine in stroke patients — Valsalva worsens ICP.

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NCLEX Test Traps !

WRONG-VS-RIGHT · THE MISTAKES STUDENTS MAKE

✗ TRAP #1 — WRONG-SIDE THINKING

Saying "Left stroke = left-side weakness." Damage is **CONTRALATERAL**.

✓ RIGHT ANSWER

Left brain stroke → **RIGHT**-side weakness + aphasia.
Right brain stroke → **LEFT**-side weakness + neglect.

✗ TRAP #2 — SHOUTING AT APHASIC PATIENT

Raising your voice when the patient can't speak.
They're
NOT DEAF
— they have a language disorder.

✓ RIGHT ANSWER

Use a normal tone, simple short sentences, yes/no questions, and picture boards. Allow extra time.

✗ TRAP #3 — TRUSTING THE RIGHT-BRAIN PATIENT'S SELF-REPORT

Believing "I can walk fine" from a right-brain stroke patient. They have **ANOSOGNOSIA**.

✓ RIGHT ANSWER

Always verify ability. **SAFETY** is the priority. Assume high fall risk regardless of patient's claims.

✗ TRAP #4 — GIVING TPA TO A HEMORRHAGIC STROKE

Administering alteplase before a CT scan confirms stroke type.

✓ RIGHT ANSWER

Non-contrast CT **FIRST**. tPA is **CONTRAINDICATED** in hemorrhagic stroke — it would worsen the bleed.

✗ TRAP #5 — AGGRESSIVE BP LOWERING IN ACUTE ISCHEMIC STROKE

Treating a BP of 200/110 in an ischemic stroke as an emergency.

✓ RIGHT ANSWER

Permissive HTN is allowed up to **220/120** in non-tPA candidates to maintain cerebral perfusion. Only treat above that or if tPA-eligible (<185/110).

✗ TRAP #6 — FEEDING BEFORE SWALLOW SCREEN

Giving a stroke patient water or meds before assessing swallow.

✓ RIGHT ANSWER

NPO until bedside swallow screen is passed.
Dysphagia → aspiration pneumonia is a leading post-stroke complication.

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Patient & Family Education

WHAT THEY NEED TO KNOW BEFORE DISCHARGE

SOS Recognize a Stroke — BE FAST

- Balance loss / sudden dizziness
- Eyes — sudden vision change
- Face drooping (smile uneven)
- Arm weakness (one arm drifts down)

Modifiable Risk Factors

- Control **HTN** — the #1 modifiable risk factor
- Manage **diabetes**, hyperlipidemia
- **Stop smoking**, limit alcohol
- Treat **A-fib** with anticoagulation as prescribed

- Speech slurred or strange
- Time — call 911 immediately; note onset time

- Healthy diet (DASH/Mediterranean), regular exercise
- Weight management; treat sleep apnea

Dysphagia & Eating Safely

- Sit **upright 90°** for meals; stay upright 30 min after
- **Chin-tuck** while swallowing; small bites & sips
- Thickened liquids if ordered (honey/nectar consistency)
- Place food on **unaffected** side of mouth
- Check the affected cheek for pocketed food after meals
- NO straws (increase aspiration risk)

Home Safety & Rehab

- Remove throw rugs, clutter, cords; install grab bars
- Use **cane on UNAFFECTED side**; lead with affected leg going down stairs ("up with the good, down with the bad")
- Adhere to **PT/OT/SLP** rehab plan
- Take medications exactly as ordered — never skip antihypertensives or anticoagulants
- Report bleeding, falls, new weakness, or new speech changes immediately
- Caregiver respite & support groups



Memory Boosters

MNEMONICS & PATTERN RECOGNITION

L = LEFT brain stroke

Think "L" for the things the LEFT brain controls:

Language
(aphasia)

Logic / math

Literacy
(reading/writing)

Lists / sequencing

Letters (analytic thinking)

R = RIGHT brain stroke

Think "R" for the RIGHT brain's role + behavior:

Reckless /
impulsive

Rapid behavior

Recognition
(spatial / faces)

Rhythm / art /
music

Reduced safety
awareness

FAST — Public stroke screen

Face drooping

Arm weakness

Speech slurred

Time to call 911

Quick pattern recognition

- **Aphasia + right-sided weakness?** → LEFT brain stroke. (*Language is on the left.*)

- **Neglect + impulsive + left-sided weakness?** → RIGHT brain stroke. (*Right brain runs spatial awareness.*)
- **"Worst headache of my life"** → Subarachnoid hemorrhage until proven otherwise.
- **Cane on the UNAFFECTED side.** "Cane goes with the strong."
- **Stairs:** "Up with the good, down with the bad."

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NCJMM Clinical Judgment ScenarioNext-Gen Clinical Judgment Measurement Model · 6 cognitive steps

 **Scenario:** A 72-year-old client is brought to the ED by family at 0830. Family states the client was last seen normal at 0700 when he was "fine, eating breakfast." At 0815 he was found sitting at the kitchen table, unable to lift his right arm, with slurred, garbled speech. He is unable to answer questions clearly but follows simple commands inconsistently.

Vitals: BP 198/104, HR 92 irregularly irregular, RR 20, SpO₂ 96% RA, T 98.6°F.

PMH: Hypertension, atrial fibrillation, hyperlipidemia. **Home meds:** Lisinopril, atorvastatin (took warfarin previously but "stopped a month ago because it was a pain").

1

Recognize Cues

Relevant: Right-arm weakness, slurred/garbled speech (expressive aphasia), inconsistent command-following, BP 198/104, irregularly irregular HR (A-fib), discontinued warfarin, onset window ~75 min ago.

2

Analyze Cues

Right-sided weakness + aphasia = **LEFT brain stroke**.
Untreated A-fib + stopped anticoagulation = high cardioembolic risk → likely **ischemic stroke**. Symptom onset is within the 4.5h tPA window.

3

Prioritize Hypotheses

#1 Acute ischemic stroke (cardioembolic) — highest priority, time-sensitive. Differentials: hemorrhagic stroke (must rule out via CT before tPA), TIA, hypoglycemia, complex migraine, seizure with Todd's paralysis.

4

Generate Solutions

Activate **stroke alert**; STAT non-contrast head CT; obtain IV access × 2; CBC, BMP, coags, glucose, troponin; 12-lead ECG; calculate NIHSS; weight in kg; verify last-known-well; keep NPO; HOB 30°; prepare for tPA if non-hemorrhagic on CT and BP <185/110.

5

Take Action

Call rapid response/stroke team. Place 2 large-bore IVs. Send labs & transport to CT immediately. Monitor BP q15min — initiate labetalol or nicardipine drip if SBP ≥185 to enable tPA. After CT rules out bleed: administer alteplase per protocol, weight-based. Document onset time precisely. NPO; continuous cardiac monitoring.

6

Evaluate Outcomes

Improvement: NIHSS decreases, strength returns to right side, speech clears, BP controlled, no bleeding (no oozing, stable Hgb, no neuro decline). **Worsening / complication:** ↓LOC, new headache, vomiting, ↑BP with ↓HR (Cushing's), new bleeding → STOP tPA, repeat CT, call provider, prepare reversal.

Diane's NGN NCLEX 2026 Visual Study Library · Right vs Left Side Stroke · Neurological Cluster

Content drawn from Saunders Comprehensive Review, ATI RN Adult Medical-Surgical, Lippincott NCLEX-RN, and AHA/ASA 2024 Stroke Guidelines.