



NCLEX NGN 2026 • ONCOLOGY • EMERGENCIES

Oncologic *Emergencies*

Life-threatening complications of cancer & its treatment — where every minute matters. Recognition and prioritization save lives. This is a high-yield, clinical-judgment-focused review covering the eight emergencies tested most often on the NGN NCLEX.



TIME-CRITICAL

CLINICAL JUDGMENT

ABC PRIORITY

NCJMM FRAMEWORK

01 Overview & Why It Matters

Definition

Oncologic emergencies are **acute, potentially life-threatening conditions** that develop in cancer patients either as a direct result of the malignancy, its metastases, or its treatment (chemo/radiation). Some occur at diagnosis; others appear hours-to-days after therapy.

- **Metabolic:** Tumor lysis syndrome, hypercalcemia, SIADH
- **Structural / Obstructive:** SVC syndrome, spinal cord compression, cardiac tamponade, increased ICP
- **Hematologic / Infectious:** DIC, febrile neutropenia / sepsis

The Nurse's Role

You are the **first line of recognition**. Chemo patients decompensate quickly — subtle changes (new back pain, a low-grade fever, mild confusion) are often the **only** warning before collapse.

<1hr

GOAL TO TREAT FEBRILE
NEUTROPENIA

24-48h

WINDOW TLS APPEARS
POST-CHEMO

#1

SYMPTOM OF CORD
COMPRESSION: BACK PAIN

100.4°F

FEVER = EMERGENCY IN
NEUTROPENIA

02 The 8 Oncologic Emergencies at a Glance

METABOLIC

01

Tumor Lysis Syndrome

Massive cell death releases intracellular contents
→ $\uparrow K^+$, $\uparrow PO_4$, $\uparrow$ uric acid, $\downarrow Ca^{2+}$ → renal failure & arrhythmia.

METABOLIC

02

Hypercalcemia of Malignancy

Bone breakdown (mets) or PTH-like peptide from tumor → calcium ≥ 13 mg/dL → confusion & arrhythmia.

METABOLIC

03

SIADH

Ectopic ADH (small-cell lung CA) → water retention
→ dilutional hyponatremia → seizures.

STRUCTURAL

04

Superior Vena Cava Syndrome

Tumor compresses SVC → venous congestion of head, neck, upper chest → facial edema, JVD, dyspnea.

STRUCTURAL

05

Spinal Cord Compression

Vertebral metastasis presses on cord → **back pain is first sign** → motor/sensory loss → paralysis.

STRUCTURAL

06

Cardiac Tamponade

Malignant pericardial effusion compresses heart → Beck's triad: $\downarrow$ BP, muffled heart sounds, JVD.

HEMATOLOGIC

07

DIC (Disseminated Intravascular Coagulation)

Systemic clotting + bleeding at the same time — classic with acute leukemia (APL) & sepsis.

INFECTIOUS

08

Febrile Neutropenia / Sepsis

ANC < 500 + T $\geq 100.4^\circ F$ → true emergency. **Abx within 1 hour.** No classic infection signs (no pus, no redness).

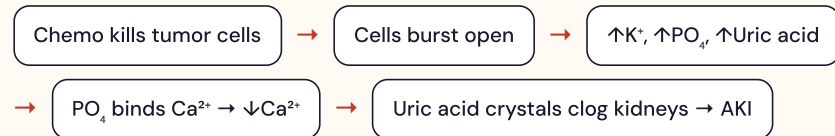
03 Deep-Dive: Emergency by Emergency

EMERGENCY 01 • METABOLIC

Tumor Lysis Syndrome (TLS)

⌚ 24–72H POST-CHEMO

— PATHOPHYSIOLOGY



Highest risk: bulky lymphomas (Burkitt's), leukemias (ALL, AML), large tumor burden, high WBC.

— SIGNS & SYMPTOMS

- 🚑 **Hyperkalemia:** peaked T-waves, weakness, lethal arrhythmias
- **Hypocalcemia:** Chvostek's, Trousseau's, tetany, seizures
- **Hyperphosphatemia:** cloudy urine, fatigue
- 🚑 **Hyperuricemia → AKI:** ↓ urine output, ↑ BUN/Cr, flank pain
- Nausea, vomiting, muscle cramps, lethargy

— PRIORITY NURSING INTERVENTIONS

- ✓ **Aggressive IV hydration** (NS 2–3× maintenance) — starts *before* chemo
- ✓ **Allopurinol** prophylactically; **rasburicase** for established TLS
- ✓ Monitor **K⁺, Ca²⁺, PO₄, uric acid, BUN/Cr** every 4–6 hrs
- ✓ Continuous **cardiac monitoring** (hyperkalemia = arrhythmia)
- ✓ Strict **I&O** ; urine output goal ≥100 mL/hr
- ✓ Prepare for possible **dialysis** if unresponsive

— HIGH-YIELD PEARLS

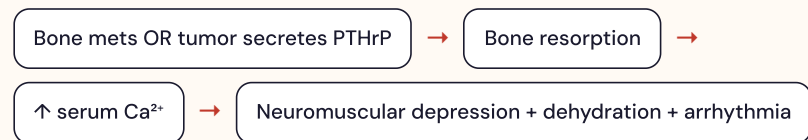
- ★ TLS is **preventable** — prevention is the priority
- ★ Mnemonic: "**4 highs & 1 low**" → ↑K, ↑PO₄, ↑Uric, ↑BUN, ↓Ca
- ★ Urine alkalization is **no longer routine** (current guideline)
- ★ First sign of arrhythmia on telemetry → **check K⁺ STAT**

EMERGENCY 02 • METABOLIC

Hypercalcemia of Malignancy

CALCIUM ≥ 13 MG/DL

PATHOPHYSIOLOGY



Most common in: breast, lung, multiple myeloma, renal cell carcinoma.

SIGNS & SYMPTOMS

- 🚑 **"Stones, bones, groans, psychiatric overtones"**
 - Confusion, lethargy, coma (psychiatric overtones)
 - Constipation, N/V, anorexia (groans)
 - Bone pain, pathologic fractures
 - Polyuria → **dehydration**, kidney stones
 - Short QT, arrhythmia, hypertension
 - Muscle weakness, hyporeflexia

PRIORITY NURSING INTERVENTIONS

- ✓ **Aggressive IV NS hydration** (200–500 mL/hr) — #1 priority
- ✓ **Loop diuretic (furosemide)** *after* hydration to promote Ca²⁺ excretion
- ✓ Administer **bisphosphonates** (pamidronate, zoledronic acid) — long-term fix
- ✓ **Calcitonin** for rapid (24-hr) reduction
- ✓ Encourage **mobility** (immobility → more bone resorption)
- ✓ **Seizure & fall precautions**; continuous telemetry
- ✓ Avoid thiazides and calcium supplements

HIGH-YIELD PEARLS

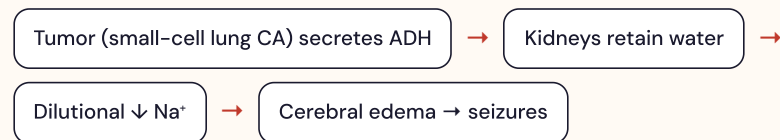
- ★ Trap: students pick thiazide → **thiazides raise Ca²⁺**, never give
- ★ Hydration **before** Lasix — giving Lasix to a dry patient worsens AKI
- ★ QT is **shortened** (opposite of hypocalcemia)
- ★ LOC changes = priority assessment finding

EMERGENCY 03 • METABOLIC

SIADH (Syndrome of Inappropriate ADH)

DILUTIONAL HYPONATREMIA

PATHOPHYSIOLOGY



SIGNS & SYMPTOMS

- **Concentrated urine** (↑ specific gravity, ↑ urine osmolality)
- **Dilute blood** (↓ serum Na⁺, ↓ serum osmolality)
- Weight gain **without** edema (fluid is intracellular)
- 🚑 **Headache, confusion, lethargy → seizures, coma**
- Muscle cramps, N/V, anorexia

PRIORITY NURSING INTERVENTIONS

- ✓ **Fluid restriction 500–1000 mL/day** — cornerstone treatment
- ✓ **3% hypertonic saline** *only* for severe symptomatic hyponatremia (seizures)
- ✓ **Correct Na⁺ slowly** (<12 mEq/L in 24 hrs) → prevents osmotic demyelination
- ✓ **Tolvaptan / demeclocycline** — ADH antagonists
- ✓ Seizure precautions, neuro checks q2h
- ✓ Daily weights, strict I&O

HIGH-YIELD PEARLS

- ★ **SIADH = "Soaked Inside"** (water retention, dilute blood)
- ★ **Opposite of DI** (diabetes insipidus = dry inside)
- ★ Rapid Na⁺ correction → **central pontine myelinolysis** (permanent brain damage)
- ★ Small-cell lung cancer is the #1 cause

EMERGENCY 04 • STRUCTURAL

Superior Vena Cava Syndrome (SVCS)

VENOUS OBSTRUCTION

PATHOPHYSIOLOGY



Most common cause: small-cell & non-small-cell lung cancer (75%).

SIGNS & SYMPTOMS

- 🚑 **Facial & periorbital edema** — worse in morning
- **JVD** , distended veins on chest/arms
- **"Stokes sign"** — tight shirt collar feeling
- Cyanosis of face, neck, upper chest
- Dyspnea, cough, stridor
- Headache, dizziness, visual changes
- Airway compromise = LATE & life-threatening

PRIORITY NURSING INTERVENTIONS

- ✓ **Elevate HOB > 30°** — reduces venous congestion (priority positioning)
- ✓ **Do NOT place IVs in upper extremities** — use lower extremity
- ✓ Apply **supplemental O₂** ; monitor airway closely
- ✓ Administer **corticosteroids** (dexamethasone) to reduce edema
- ✓ Prepare for **emergent radiation** or stent placement
- ✓ Assess **neuro & respiratory** q1h initially
- ✓ Remove tight clothing/jewelry from neck & arms

HIGH-YIELD PEARLS

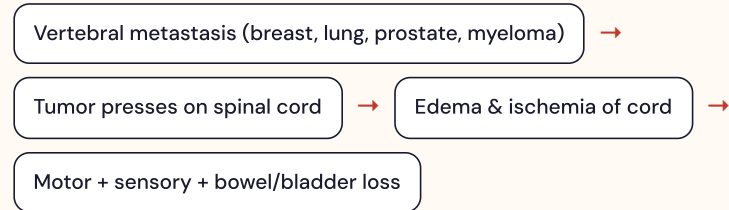
- ★ **No BP cuffs on upper arms** — impairs venous return
- ★ Radiation is typically the **first-line** emergent treatment
- ★ Think " **face + neck swelling + JVD** " in a cancer patient
- ★ Patient looks worse **lying flat** — never put supine

EMERGENCY 05 • STRUCTURAL

Spinal Cord Compression (SCC)

PARALYSIS RISK

PATHOPHYSIOLOGY



SIGNS & SYMPTOMS

- 🚨 **NEW or worsening BACK PAIN** — #1 first symptom (95%)
 - Pain worse lying flat, better sitting up (opposite of musculoskeletal pain)
 - **Motor weakness** — progresses to paraplegia/quadruplegia
 - Sensory loss below level of lesion (numbness, tingling)
- 🚨 **Bowel & bladder incontinence / retention** = late, ominous
 - Saddle anesthesia (cauda equina)

PRIORITY NURSING INTERVENTIONS

- ✓ **TIME IS CORD** — dexamethasone IV **immediately** to reduce edema
- ✓ **Logroll** patient; maintain spinal alignment until imaging clears
- ✓ Prepare for **STAT MRI** of entire spine
- ✓ Arrange **emergent radiation** or surgical decompression
- ✓ Bladder scan / straight cath for urinary retention
- ✓ DVT prophylaxis, skin integrity checks
- ✓ Pain management (opioids); avoid NSAIDs if thrombocytopenia

HIGH-YIELD PEARLS

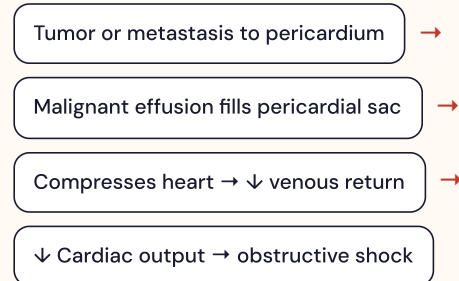
- ★ Any cancer patient + **new back pain** = SCC until proven otherwise
- ★ Function at time of treatment = function afterward — **don't wait**
- ★ Steroids **before** MRI (not after) to prevent further damage
- ★ Assess for **saddle anesthesia** and **post-void residual**

EMERGENCY 06 • STRUCTURAL

Malignant Cardiac Tamponade

OBSTRUCTIVE SHOCK

PATHOPHYSIOLOGY



SIGNS & SYMPTOMS

- 🚑 **BECK'S TRIAD:** ↓ BP + muffled heart sounds + JVD
- **Pulsus paradoxus** (↓ SBP >10 mmHg with inspiration)
- Narrowing pulse pressure
- Dyspnea, tachycardia, tachypnea
- Anxiety, sense of impending doom
- ECG: **electrical alternans** (alternating QRS amplitude)
- Echo: effusion + diastolic RV collapse

PRIORITY NURSING INTERVENTIONS

- ✓ **Prepare for emergent pericardiocentesis** — the definitive treatment
- ✓ High-Fowler's position; O₂ and large-bore IV access
- ✓ **IV fluids** to maintain preload (do NOT give diuretics)
- ✓ Continuous **cardiac monitoring** ; vasopressors if hypotensive
- ✓ Monitor for **re-accumulation** after drainage
- ✓ Assist with **pericardial window** creation for long-term control

HIGH-YIELD PEARLS

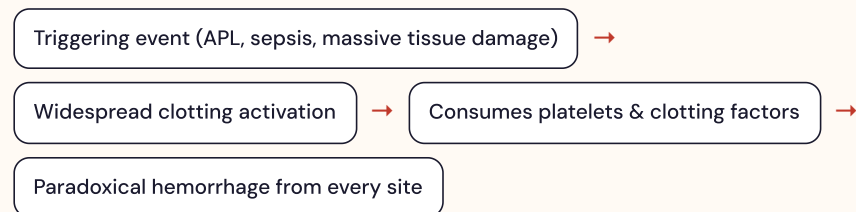
- ★ Trap: students give **diuretics** — will crash BP (you NEED preload)
- ★ Beck's triad is **late** — don't wait for all three
- ★ Pulsus paradoxus >10 = highly specific finding
- ★ Most commonly caused by **lung, breast, lymphoma, leukemia**

EMERGENCY 07 • HEMATOLOGIC

Disseminated Intravascular Coagulation (DIC)

CLOTTING + BLEEDING SIMULTANEOUSLY

PATHOPHYSIOLOGY



SIGNS & SYMPTOMS

- 🚑 **Bleeding from IV sites, gums, nose, GI, GU, rectum**
- Petechiae, ecchymosis, purpura
- **Clotting** : cold/cyanotic extremities, ↓ pulses, ↓ urine output
- Altered mental status (cerebral microthrombi)
- Hemoptysis, hematuria, melena
- Labs: ↑ PT/PTT, ↑ D-dimer, ↓ Platelets, ↓ Fibrinogen

PRIORITY NURSING INTERVENTIONS

- ✓ **Treat the underlying cause** (#1 — sepsis, chemo for APL, etc.)
- ✓ Transfuse: FFP (factors), **platelets**, **cryoprecipitate** (fibrinogen), PRBCs
- ✓ Bleeding precautions: soft toothbrush, electric razor, no IM injections, no rectal temps
- ✓ Minimize punctures; apply **pressure 5–10 min** after any stick
- ✓ Monitor: VS q15min, neuro, urine output, skin color, H&H, coags
- ✓ Low-dose heparin **only** if thrombotic phase predominates (controversial)

HIGH-YIELD PEARLS

- ★ **Acute promyelocytic leukemia (APL / M3 AML)** is the classic cancer cause
- ★ D-dimer is the single most helpful lab
- ★ Oozing from **multiple** sites simultaneously = DIC until proven otherwise
- ★ Treat the **cause**, not just the labs

EMERGENCY 08 • INFECTIOUS

Febrile Neutropenia / Sepsis

ANTIBIOTICS WITHIN 1 HOUR

PATHOPHYSIOLOGY

Chemo suppresses bone marrow →

ANC < 500/mm³ (nadir 7–14 days post-chemo) →

No neutrophils = no inflammatory response →

Infection hidden — fever may be **ONLY** sign

Definition: ANC <500 (or <1000 trending down) + single temp ≥100.4°F (38.0°C) sustained or ≥101°F (38.3°C) once.

SIGNS & SYMPTOMS

🚨 **Fever may be the **ONLY** sign — classic infection signs absent**

- No pus, no redness, minimal drainage, no infiltrates on CXR (no WBCs!)
- Subtle tachycardia, tachypnea, ↓ BP, confusion = sepsis
- Mucositis, perianal pain, cough, burning with urination
- Cold chills, rigors

PRIORITY NURSING INTERVENTIONS

- ✓ **Broad-spectrum IV antibiotics within 1 HOUR** (cefepime, pip-tazo, meropenem)
- ✓ Obtain **blood cultures × 2** (peripheral + central line) **BEFORE** antibiotics — but do not delay abx
- ✓ Cultures: urine, sputum, stool, wound sites
- ✓ **Neutropenic precautions** : private room, strict hand hygiene, no fresh flowers/plants, no raw fruits/veg, no crowds
- ✓ NO rectal temps, no suppositories, no enemas
- ✓ Monitor for sepsis: VS q1h, lactate, MAP ≥65
- ✓ Administer **filgrastim (G-CSF)** to stimulate WBC production

HIGH-YIELD PEARLS

- ★ The "golden hour" — abx delay >1 hr significantly ↑ mortality
- ★ Do **not** wait for culture results to start antibiotics
- ★ Fever in neutropenia = sepsis until proven otherwise
- ★ Low-bacteria diet, handwashing = strongest protection

04 Lab Values: Quick Comparison

EMERGENCY	KEY LABS	CLASSIC PATTERN	FIRST-LINE TREATMENT
Tumor Lysis Syndrome	K ⁺ , PO ₄ , Uric acid, Ca ²⁺ , BUN/Cr	↑ K ⁺ ↑ PO ₄ ↑ Uric ↓ Ca ²⁺	IV fluids + allopurinol / rasburicase
Hypercalcemia of Malignancy	Serum Ca ²⁺ , albumin, PTHrP	↑ Ca ²⁺ ≥13 mg/dL short QT	IV NS + furosemide + bisphosphonate
SIADH	Serum Na ⁺ & osmolality, urine osmolality, SG	↓ Na ⁺ ↓ serum osm ↑ urine osm	Fluid restriction ± 3% NaCl (slow!)
SVC Syndrome	CT chest (diagnostic)	Mediastinal mass, SVC compression	HOB ↑, steroids, radiation / stent
Spinal Cord Compression	MRI full spine	Vertebral lesion + cord impingement	Dexamethasone STAT → radiation / surgery
Cardiac Tamponade	Echo, ECG, CXR	Effusion + RV collapse + electrical alternans	Pericardiocentesis (emergent)
DIC	PT, PTT, fibrinogen, D-dimer, platelets	↑ PT/PTT ↑ D-dimer ↓ plts ↓ fibrinogen	Treat cause + FFP/platelets/cryo
Febrile Neutropenia	ANC, blood cultures, lactate, CBC	ANC < 500 + T ≥ 100.4°F	Broad-spectrum abx <1 hr + G-CSF

05 Key Pharmacology

Allopurinol / Rasburicase

ANTIHYPERURICEMIC • TLS PREVENTION/TREATMENT

MECHANISM	Allopurinol blocks uric acid formation; rasburicase breaks down existing uric acid into soluble allantoin.
SIDE EFFECTS	Rash (Stevens-Johnson), hepatotoxicity; rasburicase → hemolysis in G6PD deficiency
NURSING	Start before chemo; push fluids; monitor uric acid, renal function; screen G6PD before rasburicase

Dexamethasone

CORTICOSTEROID • SCC, SVCS, BRAIN EDEMA

MECHANISM	Reduces tumor edema and inflammation around neural/vascular structures
SIDE EFFECTS	Hyperglycemia, immunosuppression, GI bleed, osteoporosis, mood changes, insomnia
NURSING	Give IV push STAT for SCC (before MRI); monitor glucose, signs of infection; never stop abruptly

Bisphosphonates (Zoledronic acid, Pamidronate)

ANTIRESORPTIVE • HYPERCALCEMIA OF MALIGNANCY

MECHANISM	Inhibit osteoclast-mediated bone resorption → lowers calcium
SIDE EFFECTS	Osteonecrosis of the jaw, flu-like symptoms, nephrotoxicity, hypocalcemia
NURSING	Ensure renal function adequate; pre-dental exam; hydrate; monitor Ca ²⁺ after dose

Calcitonin

HORMONE • RAPID-ACTING HYPERCALCEMIA REDUCTION

MECHANISM	Inhibits osteoclasts + increases calcium excretion in urine (works in 24 hrs)
SIDE EFFECTS	Nausea, flushing, hypersensitivity; tachyphylaxis after 48 hours
NURSING	Bridge while bisphosphonates take effect; skin-test if salmon calcitonin allergy history

Tolvaptan / Demeclocycline

ADH ANTAGONIST • SIADH

MECHANISM Blocks ADH action on kidneys → promotes free water excretion (aquaresis)

SIDE EFFECTS Rapid sodium rise → **osmotic demyelination**; hepatotoxicity; thirst

NURSING Start in hospital; monitor Na⁺ q6h; limit rise to <12 mEq/L/24h; hepatic labs

Filgrastim (G-CSF, Neupogen)

COLONY-STIMULATING FACTOR • NEUTROPENIA

MECHANISM Stimulates bone marrow to produce neutrophils — shortens neutropenic nadir

SIDE EFFECTS Bone pain (classic), splenomegaly/rupture, fever

NURSING SQ injection; teach bone pain is *expected* (tylenol/NSAIDs); monitor CBC; refrigerate

Broad-Spectrum Antibiotics

CEFEPIME, PIP-TAZO, MEROPENEM • FEBRILE NEUTROPENIA

MECHANISM Cover gram-negative + Pseudomonas; add vancomycin if central line / MRSA risk

SIDE EFFECTS Rash, C. difficile, renal toxicity, electrolyte shifts

NURSING **Within 1 hour** of fever; cultures first but don't delay abx; monitor renal function

Blood Products for DIC

FFP, PLATELETS, CRYOPRECIPITATE, PRBCS

MECHANISM FFP = all clotting factors; cryo = fibrinogen + factor VIII; platelets for thrombocytopenia

SIDE EFFECTS Transfusion reactions, fluid overload, TRALI, citrate toxicity with large volumes

NURSING Two-RN verification; NS only; VS at 15 min; monitor fibrinogen, platelets q4–6h

06 NCLEX Test Traps & Commonly Missed Distinctions

⚠️ Trap: "Cancer pt with fever — Tylenol first"

WRONG — masking the fever delays abx and hides sepsis.

RIGHT — draw cultures + start broad-spectrum antibiotics <1 hr. Antipyretics come *after*.

⚠️ Trap: "SIADH — push IV fluids"

WRONG — the problem IS too much water already.

RIGHT — fluid **RESTRICTION** 500–1000 mL/day. Hypertonic saline *only* for severe symptomatic hyponatremia.

⚠️ Trap: "Tamponade — give Lasix for fluid"

WRONG — dropping preload will collapse a preload-dependent heart.

RIGHT — **FLUID BOLUS** + emergent pericardiocentesis. Never diurese tamponade.

⚠️ Trap: "Back pain — give NSAIDs / muscle relaxers"

WRONG — missing spinal cord compression = permanent paralysis.

RIGHT — any cancer pt with **NEW BACK PAIN** = dexamethasone IV + STAT MRI.

⚠️ Trap: "Hypercalcemia — Lasix first"

WRONG — these patients are already dehydrated; Lasix will worsen AKI.

RIGHT — **NS HYDRATION FIRST**, *then* loop diuretic.

⚠️ Trap: "TLS — K⁺ is 6.5, give calcium"

WRONG — adding calcium with high phosphate = crystal deposits (AKI).

RIGHT — treat K⁺ with insulin/D5O, kayexalate, or dialysis. Correct phosphate first.

⚠️ Trap: "SVCS — start an IV in the AC"

WRONG — upper extremity access worsens venous congestion.

RIGHT — use **LOWER EXTREMITY** access; elevate HOB; remove tight clothing.

⚠️ Trap: "DIC — give heparin, patient is clotting"

WRONG — routine heparin in actively bleeding DIC = catastrophic hemorrhage.

RIGHT — **TREAT THE UNDERLYING CAUSE** (sepsis, APL) + replace products (FFP, cryo, platelets).

⚠️ Trap: "Neutropenic — rectal temp for accuracy"

WRONG — rectal temps/suppositories/enemas = mucosal tears = sepsis portal.

RIGHT — oral or axillary only; no rectal anything in neutropenia.

⚠️ Trap: "SIADH — correct sodium fast"

WRONG — rapid correction = **CENTRAL PONTINE MYELINOLYSIS** (permanent brain damage).

RIGHT — correct slowly: <12 mEq/L in 24 hours, <18 mEq/L in 48 hours.

07 NCJMM Clinical Judgment Scenario

Clinical Scenario

A **54-year-old male** with newly diagnosed Burkitt's lymphoma received his first cycle of induction chemotherapy **36 hours ago**. The nurse enters the room and finds him lethargic. Vitals: HR 118 irregular, BP 96/58, RR 24, SpO₂ 94%. The patient reports nausea, muscle cramping, and says his "heart feels funny." Urine output over the past 4 hours has been **80 mL**. Telemetry shows **peaked T-waves**. Latest labs: K⁺ **6.4**, Ca²⁺ **7.2**, PO₄ **6.8**, Uric acid **11.2**, Creatinine **2.4** (baseline 0.9).

1

Recognize Cues

High-risk cancer + recent chemo + oliguria + hyperK/hypoCa/hyperPO₄/hyperuricemia + ↑Cr + peaked T-waves = classic **Tumor Lysis Syndrome** with cardiac toxicity.

2

Analyze Cues

Peaked T-waves + irregular HR = imminent lethal arrhythmia. Creatinine is 2.5× baseline → AKI from uric acid crystallization. Low Ca²⁺ worsens QT and seizure risk.

3

Prioritize & Generate Solutions

1st — Airway/cardiac: continuous telemetry + notify HCP STAT. **2nd — Treat K⁺:** calcium gluconate (cardio-protect), insulin+D50, kayexalate/dialysis. **3rd — Push NS,** give **rasburicase**, strict I&O.

4

Evaluate Outcomes

Goal: T-waves normalize, K⁺ <5.0, UO ≥100 mL/hr, creatinine trending down, uric acid <8. Reassess labs q4h. Escalate to dialysis if no improvement in 6–12 hrs.

08 Patient & Family Education



Report Fever Immediately

Take temperature daily. Any temperature $\geq 100.4^{\circ}\text{F}$ (38°C) is a medical emergency — call oncology, don't wait. Never take acetaminophen first — it masks the fever.



New Back Pain = Call Now

Any **new, worsening, or nighttime back pain** in a cancer patient is an emergency. Don't attribute it to overuse. Also report new weakness, numbness, or trouble urinating.



Hydrate Aggressively

Drink **2–3 liters/day** during chemo (unless restricted for SIADH/CHF). Helps prevent TLS, hypercalcemia, and protects kidneys from chemo agents like Cytoxan.



Neutropenic Precautions

Handwashing, avoid crowds & sick people, **no fresh flowers, raw fruits/vegetables, or sushi**. No rectal medications. Use soft toothbrush; electric razors only.



Know Your Warning Signs

Bleeding from multiple sites, facial swelling or tight shirt-collar feeling, new confusion or seizures, severe muscle cramps, palpitations — call 911 or the oncology line.



24-Hour Oncology Line

Keep the on-call oncology number visible. Don't go to a random ER — bring your **chemo passport** (regimen, last dose date, recent labs) so providers can move fast.



Take Prophylaxis Faithfully

Allopurinol, G-CSF injections, antiemetics, antivirals/antifungals — these **prevent** emergencies. Do not skip doses even if you feel fine.



Low-Bacteria Diet

Cook all foods thoroughly, wash surfaces, **no unpasteurized dairy, soft cheeses, or deli meats**. No raw honey, no probiotics. Purified water only.



Mouth & Skin Care

Rinse mouth with saline or baking-soda water 4×/day — prevents mucositis infection. Moisturize skin; don't scratch rashes. Report open sores immediately.

09 Memory Boosters & Mnemonics





CRAB

HYPERCALCEMIA OF MALIGNANCY (ALSO MYELOMA) SIGNS

- C** — Calcium elevated
- R** — Renal dysfunction
- A** — Anemia
- B** — Bone pain/lesions

FACES

SVC SYNDROME PRESENTATION

- F** — Facial swelling
- A** — Arm edema
- C** — Cough / collar tightness
- E** — Engorged veins (JVD)
- S** — Shortness of breath

BECK'S

CARDIAC TAMPONADE TRIAD

- B** — BP down (hypotension)
- E** — Engorged neck veins (JVD)
- C** — Cardiac sounds muffled
- K** — "Know your pulsus paradoxus"
- S** — Shock (obstructive)

TLS

"4 HIGHS & 1 LOW"

- ↑ Potassium (K^+)
- ↑ Phosphate (PO_4)
- ↑ Uric acid
- ↑ BUN / Creatinine
- ↓ Calcium (Ca^{2+})

SOAKED

SIADH — "SOAKED INSIDE"

- S** — Serum Na^+ low
- O** — Osmolality serum low
- A** — ADH too much
- K** — Keep fluids restricted
- E** — Edema absent (weight ↑)
- D** — Dilute plasma / concentrated urine

PAIN

SPINAL CORD COMPRESSION PRIORITY

- P** — Pain in back (new, nighttime)
- A** — Autonomic (bowel/bladder)
- I** — Imaging (MRI STAT)
- N** — Needs steroids NOW

BLEED

DIC RECOGNITION

- B** — Bleeding everywhere
- L** — Low platelets & fibrinogen

HOT CHEMO

FEBRILE NEUTROPENIA RESPONSE

- H** — Handwash, private room
- O** — Obtain cultures ×2

- E** — Elevated PT/PTT/D-dimer
- E** — Embolism / clots forming
- D** — Determine & treat the CAUSE

- T** — Temperature ≥ 100.4 = alarm
- C** — Cover broadly (abx <1 hr)
- H** — Hold rectal anything
- E** — Evaluate for sepsis (lactate, MAP)
- M** — Monitor ANC daily
- O** — Offer G-CSF (filgrastim)

The "Always STOP & START" Rule

When **anything** goes wrong in oncology: **STOP** the offending agent (chemo, blood, radiation source). **START** airway/cardiac support + IV NS. Then call the HCP. This simple pattern will carry you through most NGN oncology SATA items.

Oncologic Emergencies — Study Guide for NGN NCLEX 2026 • Aligned with NCJMM Clinical Judgment Model

Review this infographic alongside your Chemotherapy Toxicities, Radiation Therapy, and Cesium Implant guides for complete oncology coverage.