PEDIATRIC NURSING · NGN NCLEX 2026

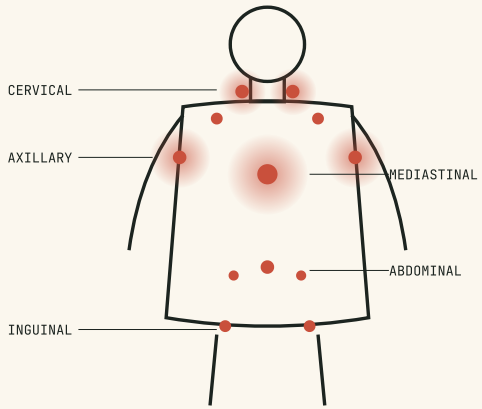
Pediatric Lymphomas *decoded*

Hodgkin vs Non-Hodgkin — the pathophysiology, presentation, and nursing priorities a pediatric nurse must own before test day.

NGN · HIGH YIELD

Rev. 2026 · Test Plan Aligned

01 What *is* a Lymphoma?



Cancer of the lymphatic system.

Lymphomas are **malignant proliferations of lymphocytes** that accumulate in lymph nodes, spleen, thymus, bone marrow, and other lymphoid tissue — causing the painless, rubbery lymphadenopathy that defines the disease.

The **two major families** — Hodgkin and Non-Hodgkin — look similar at first glance but differ in **cell biology, pattern of spread, age distribution, and prognosis.** Distinguishing them is the first NCLEX skill.

⊕ 3rd most common childhood cancer (after leukemia & CNS tumors)

02 Hodgkin *vs* Non-Hodgkin — the NCLEX split

FAMILY A

Hodgkin Lymphoma

REED-STERNBERG +

PEAK AGE	Adolescents & young adults **15–19 yrs** (and adults 55+). Rare under 5.
HALLMARK	**Reed-Sternberg cell** — giant bi-nucleated "owl-eye" lymphocyte on biopsy.
SPREAD	**Contiguous & orderly** — moves node-to-node along lymph chains.
SITE	Above the diaphragm — **cervical / supraclavicular** nodes most common.
B-SYMPS	**Common** — fever, drenching night sweats, weight loss.
PROGNOSIS	**Excellent** — >90% cure rate in early stages.

VS

FAMILY B

Non-Hodgkin Lymphoma

NO REED-STERNBERG

PEAK AGE	More common in **younger children** (<14 yrs). Boys > girls.
HALLMARK	**B-cell or T-cell origin**; Burkitt, lymphoblastic, & large-cell are top pediatric types.
SPREAD	**Unpredictable, diffuse, widespread** — jumps across lymph chains.
SITE	Often **extranodal** — GI tract, mediastinum, CNS, bone marrow.
B-SYMPS	**Less common**; presentation is often a rapidly enlarging mass.
PROGNOSIS	**Aggressive** — but intensive chemo cures most pediatric cases.

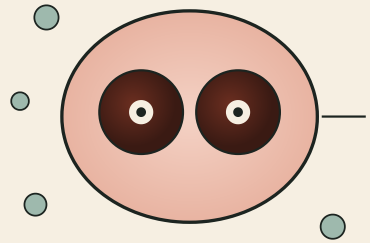
03 Clinical Picture — what the child *shows up* with

Hodgkin Lymphoma

ADOLESCENT · CERVICAL NODE · REED-STERNBERG

Non-Hodgkin Lymphoma

YOUNG CHILD · EXTRANODAL · AGGRESSIVE



Reed-Sternberg
"OWL-EYE" CELL
bi-nucleated, giant

SIGNS & SYMPTOMS

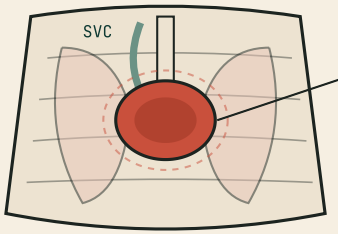
- **Painless, firm, rubbery, movable** lymphadenopathy — cervical/supraclavicular most common
- Persistent **non-tender** swelling that *doesn't resolve* with antibiotics
- **B-symptoms:** fever >38 °C, drenching night sweats, >10% weight loss in 6 mo
- Pruritus, fatigue, anorexia
- *Classic tell:* pain in affected nodes **after alcohol** ingestion (rare but pathognomonic)

DIAGNOSIS & STAGING

- **Excisional lymph node biopsy** = gold standard (confirms Reed-Sternberg)
- CBC, ESR, LDH; PET/CT for staging
- **Ann Arbor Staging I–IV** + "A" (no symptoms) or "B" (with B-symptoms)

TREATMENT

- Combination chemo — **ABVD** regimen (Adriamycin, Bleomycin, Vinblastine, Dacarbazine)
- Radiation for localized disease



Mediastinal mass
→ SVC SYNDROME
airway emergency

SIGNS & SYMPTOMS

- **Painless lymphadenopathy** — often widespread, rapid onset
- **Mediastinal mass** → cough, dyspnea, orthopnea, facial/neck swelling, JVD → **SVC SYNDROME** 🚨
- Abdominal mass, pain, distension, intussusception (Burkitt type)
- CNS involvement — HA, cranial nerve palsies
- Bone marrow infiltration — pallor, bruising, petechiae (mimics leukemia)

DIAGNOSIS

- **Lymph node / tissue biopsy** with immunohistochemistry & flow cytometry
- Bone marrow aspiration + **lumbar puncture** (CNS involvement check)
- CT chest/abdomen/pelvis; **labs for tumor lysis** baseline

TREATMENT

- **Intensive multi-agent chemotherapy** — CHOP-based regimens
- **Intrathecal chemo** (CNS prophylaxis) — critical in pediatric NHL

- Stem cell transplant for relapse

- Rituximab (B-cell types), radiation select cases, transplant for relapse

04 The *"B" Symptoms* — tested every time

B *symptoms*

SYSTEMIC TRIAD → STAGE "B"

Fever

Unexplained, persistent, >38 °C (100.4 °F). Often Pel-Ebstein (cyclic) in Hodgkin.

Night Sweats

"Drenching" — child must change sleepwear/sheets overnight.

Weight Loss

Unintentional loss of >10% body weight within the last 6 months.

05 Nursing Priorities — *do not miss*

Emergency

Tumor Lysis Syndrome (TLS)

Massive cell breakdown at chemo initiation dumps intracellular contents into blood. **Highest risk: NHL (Burkitt), large tumor burden.**

K^+	↑ HIGH	PO_4	↑ HIGH
Uric Acid	↑ HIGH	Ca^{2+}	↓ LOW

→ **Aggressive IV hydration** (2–4× maintenance)

→ **Allopurinol or Rasburicase** pre-chemo

Infection

Neutropenic Precautions

Chemo = **bone marrow suppression**. Fever in a neutropenic child is a MEDICAL EMERGENCY.

→ Private room; no fresh flowers/raw produce

→ Strict hand hygiene; screen visitors for illness

→ **No live vaccines** during tx

Psychosocial

Body Image & Development

Adolescents with Hodgkin face identity & peer challenges. Address **directly, honestly, age-appropriately.**

→ Alopecia — offer wig/scarf options *before* hair loss

→ Fertility counseling BEFORE chemo starts

- → Monitor BUN/Cr, strict I&O, cardiac rhythm (hyperkalemia!)
- → Watch for acute kidney injury, arrhythmias, tetany

- → Temp ≥38 °C → blood cultures + broad-spectrum abx within 1 hr

- → Involve teen in decisions — preserve autonomy
- → Connect with peer support groups

06 Memory *hooks*

HODGKIN HALLMARK

Think "OWL"

- **O** **Owl-eye** Reed-Sternberg cell on biopsy
- **W** **Wakes up** drenched — night sweats & B-symptoms
- **L** **Lump** in the neck — painless cervical/supraclavicular node

TLS LABS

Think "3-UP 1-DOWN"

- ↑ **Potassium** — watch for cardiac arrhythmias
- ↑ **Phosphorus** — binds calcium
- ↑ **Uric acid** — precipitates in kidneys → AKI
- ↓ **Calcium** — tetany, Chvostek/Trousseau, seizures

Top NCLEX test-day tips

01 "**Painless, rubbery, movable** cervical node in a 16 y/o" → **Hodgkin** until proven otherwise.

02 **Reed-Sternberg cell = Hodgkin.** If the question names this cell, do not pick NHL.

03 Child with **dyspnea + facial swelling + JVD** → think **mediastinal mass / SVC syndrome** (NHL).

04 **TLS prevention = hydration + allopurinol** BEFORE chemo, not after.

05 Neutropenic fever ≥38 °C → **culture + antibiotics within 1 hour**. Every time.

06 **NO live vaccines** during or shortly after chemo — and none to household contacts either (avoid live oral polio / live attenuated flu).

07 NHL spreads **unpredictably & extranodally**; Hodgkin spreads **contiguously** — prioritize early dx in NHL.

08 Always discuss **fertility preservation** with adolescent & family BEFORE first chemo dose.

Pediatric Oncology · Study Card

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