CARDIAC SYSTEM · INFLAMMATORY DISORDER

Pericarditis.

Inflammation of the pericardial sac — recognize the pattern, beat the trap, save the heart.

NGN NCLEX 2026 | CLINICAL JUDGMENT | CARDIAC · MED-SURG | PRIORITY RECOGNITION

01 Definition & Overview

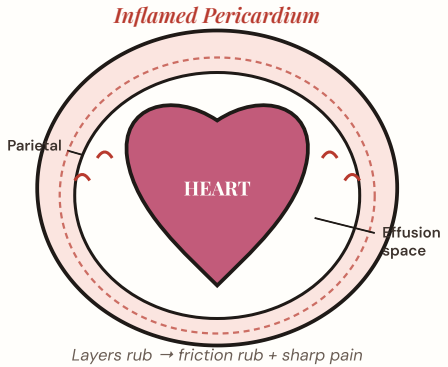
WHAT IT IS · WHY IT MATTERS

What is Pericarditis?

Inflammation of the **pericardium** — the double-layered fibroserous sac that surrounds the heart. The two layers (visceral & parietal) rub together, producing the classic **friction rub** and pleuritic chest pain.

Why it matters on the NCLEX

It mimics MI but is managed differently. It can progress to **cardiac tamponade** (life-threatening) or **constrictive pericarditis** (chronic). Nurses must *recognize the pattern, rule out tamponade, and prioritize hemodynamics*.



Anatomy of the inflamed pericardial sac

02 Pathophysiology

STEP-BY-STEP MECHANISM

Common Triggers → Viral (Coxsackie) | Post-MI (Dressler's) | Uremia / CKD | Autoimmune (SLE, RA) | Bacterial / TB | Cardiac surgery | Radiation | Chest trauma

1. **Trigger** — Virus, MI, uremia, autoimmune, trauma
2. **Inflammation** — Pericardial layers swell & redden
3. **Friction** — Visceral & parietal layers rub
4. **Effusion** — Fluid accumulates in pericardial space
5. **Tamponade** — Compression → ↓ cardiac output

Two dangerous pathways:

Acute → Effusion → Tamponade: Rapid fluid buildup → heart can't fill → SHOCK.
Chronic → Constrictive Pericarditis: Fibrosis & scarring → rigid sac → restricted diastolic filling → right-sided heart failure signs.

03 Signs & Symptoms

EARLY VS. SEVERE / TAMPONADE

Early / Classic Findings

- **Sharp, stabbing chest pain** — substernal, radiates to neck/shoulder/back (especially LEFT trapezius ridge — pathognomonic!)
- Pain **WORSE** with inspiration, lying flat, swallowing, coughing
- Pain **BETTER** sitting up & leaning forward
- **Pericardial friction rub** — scratchy, leathery sound at LLSB HALLMARK
- Low-grade fever, malaise, fatigue
- Tachycardia, dyspnea
- ECG: **Diffuse ST elevation + PR depression**
- ↑ ESR, ↑ CRP, ↑ WBC

Late / Tamponade Findings 🚨

- **Beck's Triad** — JVD, muffled heart sounds, hypotension EMERGENCY
- **Pulsus paradoxus** — SBP drop >10 mmHg with inspiration RED FLAG
- Narrowed pulse pressure
- Severe dyspnea, orthopnea, anxiety
- Cool, clammy, pale skin (shock)
- Decreased LOC
- Tachycardia (compensatory) → eventual bradycardia
- Constrictive: peripheral edema, ascites, hepatomegaly (right-HF signs)

The 3 P's of Pericarditis Pain

P	P	P
Pleuritic	**Positional**	**Pointed/Sharp**
Worse with breathing & coughing	Worse lying flat · better leaning forward	Stabbing, not crushing like MI

Beck's Triad — Recognize Tamponade Instantly

If you see all three together → call rapid response, prepare for emergency pericardiocentesis.

H	H	H
Hushed Heart	**High JVP**	**Hypotension**

Muffled / distant heart sounds	Distended jugular veins	↓ BP & narrow pulse pressure

04 Priority Nursing Interventions

ABCS · SAFETY · NCLEX PRIORITIZATION

ABC Priority Airway → Breathing → **Circulation** (highest concern with tamponade) → Disability → Exposure. Always assess for ↓ cardiac output FIRST.

1 Position upright, leaning forward
Reduces pressure on inflamed pericardium → relieves pain & eases breathing.

2 Continuous cardiac monitoring
Watch ECG for ST changes, dysrhythmias; vital signs q15min if unstable.

3 Auscultate for friction rub
Diaphragm at LLSB, patient leaning forward, breath held. Document changes.

4 Assess for tamponade q1–2h
Beck's triad, pulsus paradoxus, narrowed pulse pressure, ↓ LOC.
NOTIFY HCP STAT.

5 Administer NSAIDs & colchicine
Give with food; monitor renal function & GI bleeding. First-line therapy.

6 O_2 & IV access
Supplemental O_2 for SpO_2 < 92%; maintain large-bore IV for emergencies.

7 Pain management & bed rest
NSAIDs for pain; opioids only if severe. Limit activity until inflammation resolves.

8 Prepare for pericardiocentesis
If tamponade: emergency drainage of pericardial fluid. Consent, equipment, support.

05 Pharmacology

DRUGS · MECHANISMS · NURSING CARE

FIRST-LINE · NSAID

Ibuprofen / Indomethacin / Aspirin

Block prostaglandins → reduce pericardial inflammation & pain.

- **SE:** GI bleed, renal impairment, fluid retention
- **Give WITH food** & full glass of water
- Monitor BUN, creatinine, H&H, stool for blood
- Avoid in active GI bleed, severe CKD
- Aspirin preferred post-MI (Dressler's)

ADJUNCT · ANTI-INFLAMMATORY

Colchicine

Inhibits neutrophil migration → reduces inflammation & recurrence.

- **SE:** Diarrhea (most common), N/V, myopathy
- Reduces recurrence by ~50% — KEY drug
- Monitor CBC & liver enzymes
- Adjust dose for renal impairment
- Hold for severe diarrhea

REFRACTORY · STEROID

Prednisone (Corticosteroids)

Suppresses immune response — for autoimmune or NSAID-resistant cases.

- **SE:** Hyperglycemia, ↑ infection risk, osteoporosis, mood changes
- **Give WITH food** in the morning
- **NEVER stop abruptly** — taper to avoid Addisonian crisis
- Monitor blood glucose, BP, weight
- Last resort — increases recurrence risk

CAUSE-SPECIFIC

Antibiotics / Antivirals / Dialysis

Treat the underlying cause — bacterial, viral, or uremic.

- **Bacterial:** IV antibiotics + drainage
- **Uremic:** Hemodialysis (definitive treatment)
- **TB:** RIPE therapy (rifampin, isoniazid, pyrazinamide, ethambutol)
- Monitor cultures, drug levels, organ function
- Treat root cause to prevent recurrence

06 NCLEX Test Traps

COMMON CONFUSIONS · WRONG-ANSWER PATTERNS

⚠ Trap #1: Confusing pericarditis pain with MI pain

WRONG THINKING
"Crushing substernal chest pain — must be MI. Give nitro & morphine."

→

CORRECT ANSWER
Pericarditis = SHARP, pleuritic, positional. RELIEVED by leaning forward. MI pain is crushing & NOT relieved by position.

⚠ Trap #2: Missing diffuse ST elevation

WRONG THINKING
"ST elevation = STEMI. Activate cath lab immediately."

→

CORRECT ANSWER
Pericarditis ECG = **DIFFUSE** (global) ST elevation + **PR DEPRESSION**. STEMI = ST elevation in specific leads matching one coronary artery.

⚠ Trap #3: Treating tamponade with fluids only

WRONG THINKING
"Hypotensive patient — give fluid bolus and reassess."

→

CORRECT ANSWER
Tamponade requires **PERICARDIOCENTESIS** — fluid is a temporary bridge, not the fix. The compression must be relieved.

⚠ Trap #4: Lying patient flat for "rest"

WRONG THINKING
"Patient is in pain — let them lie flat to rest."

→

CORRECT ANSWER
ALWAYS position **UPRIGHT, LEANING FORWARD**. Lying flat WORSENS pericarditis pain & dyspnea.

⚠ Trap #5: Stopping steroids abruptly when patient feels better

WRONG THINKING

→

CORRECT ANSWER
NEVER stop steroids abruptly. **ALWAYS TAPER**

"Symptoms gone — stop the prednisone."

to prevent adrenal insufficiency & rebound inflammation.

07 NCJMM Clinical Judgment Framework

NGN-STYLE 6-STEP THINKING

STEP 1

Recognize Cues

Sharp pleuritic chest pain, friction rub at LLSB, low-grade fever, ↑ ESR/CRP, diffuse ST elevation, JVD if effusion.

STEP 2

Analyze Cues

Differentiate from MI (positional pain, diffuse ECG changes). Identify trigger (viral, post-MI, uremic). Watch for tamponade red flags.

STEP 3

Prioritize Hypotheses

#1 Risk for ↓ cardiac output (tamponade) #2 Acute pain #3 Anxiety #4 Risk for impaired gas exchange.

STEP 4

Generate Solutions

Position upright, NSAIDs + colchicine, continuous monitoring, prepare for pericardiocentesis if tamponade signs.

STEP 5

Take Action

Administer meds with food, elevate HOB & have patient lean forward, monitor vitals q15min, notify HCP for Beck's triad.

STEP 6

Evaluate Outcomes

Pain relief (0–3/10), HR & BP stable, no Beck's triad, friction rub diminishing, ECG normalizing, no tamponade.

08 Patient & Family Education

DISCHARGE TEACHING ESSENTIALS

1. **Take meds with food**
   NSAIDs, colchicine, and steroids must be taken with meals to protect the stomach and prevent GI bleeding.

2. **Complete the full course**
   Continue colchicine for at least 3 months — even when symptoms resolve — to prevent recurrence.

3. **NEVER stop steroids suddenly**
   Always taper as prescribed. Stopping abruptly can cause adrenal crisis and rebound inflammation.

4. **Rest & avoid strenuous activity**
   Limit exertion until inflammation resolves (often weeks). No competitive sports until cleared.

5. **Position for comfort**
   Sit up and lean forward when pain flares. Use pillows in bed to elevate the upper body.

6. **Report warning signs IMMEDIATELY**
   Worsening chest pain, severe shortness of breath, fainting, swollen ankles, neck vein distention, fever >101°F.

7. **Follow-up labs & ECGs**
   ESR, CRP, troponin, & ECG to monitor resolution. Echo to check for effusion or constriction.

8. **Treat underlying cause**
   Manage SLE, RA, CKD, or HIV as prescribed. Stay current on dialysis if uremic. Hand hygiene to prevent viral triggers.

09 Memory Boosters & Mnemonics

PATTERN RECOGNITION · ANCHORS

"3 P's"

Pericarditis Pain Pattern

- **P** **Pleuritic** — worse with breathing
- **P** **Positional** — worse lying down, better leaning forward
- **P** **Pointed/Sharp** — stabbing (not crushing like MI)

"3 H's"

Beck's Triad of Tamponade

- **H** **Hushed** — muffled heart sounds
- **H** **High** — High JVP (distended jugular veins)
- **H** **Hypotension** — low BP, narrow pulse pressure

"PERICARD"

Causes of Pericarditis

- **P** Post-MI (Dressler's syndrome)
- **E** Effusion (chronic)
- **R** Radiation
- **I** Infection (viral, bacterial, TB)
- **C** Connective tissue (SLE, RA)
- **A** Acute kidney injury / Uremia
- **R** Rheumatic fever
- **D** Drugs / Trauma

"SIT & LEAN"

The Position Rule

- **S** Sit upright
- **I** Incline forward
- **T** Take pressure off pericardium
- → **Pain relief + easier breathing.** NEVER lay them flat.

"NCC"

Treatment Trio

- **N** **NSAIDs** — first-line for inflammation & pain

"DIFFUSE"

ECG Clue (Pericarditis vs. STEMI)

- → **Pericarditis:** Diffuse ST elevation across MANY leads + PR depression

C **Colchicine** — prevents recurrence

C **Corticosteroids** — last resort, refractory cases

→ **STEMI:** ST elevation in SPECIFIC contiguous leads (one artery's territory)

★ If it's everywhere → think pericarditis. If it's one zone → think MI.

Pericarditis · Cardiac Inflammation Reference · NGN NCLEX 2026 Study Library

Recognize the pattern · Position the patient · Prevent the tamponade.