Acute Pericarditis

Two of four criteria · NSAID + colchicine → taper by CRP

COLCHICINE HALVES IT
recurrence risk

DIAGNOSE *ESC: any 2 of 4*

1 · PERICARDITIC CHEST PAIN

Sharp and **pleuritic**, **worse lying flat, relieved sitting forward**. Present in the large majority of cases and usually the strongest clue.

2 · FRICTION RUB

Scratchy, triphasic, best at the left sternal border with the patient leaning forward. **Highly specific but evanescent** — listen repeatedly.

3 · ECG | 4 · EFFUSION

Diffuse concave ST elevation with PR depression (and PR elevation in aVR). Plus a **new or worsening pericardial effusion** on echo.

THE CRITICAL DISTINCTION — PERICARDITIS vs STEMI

Pericarditis: ST elevation is **diffuse and does not respect a coronary territory**, concave upward, with **PR depression** and **no reciprocal change** (except aVR/V1). **STEMI:** regional, convex, with **reciprocal depression** and evolving Q waves. When genuinely unsure, treat as STEMI and get the angiogram — the cost of missing an occlusion is far higher.

TREAT *anti-inflammatory plus colchicine — both, not either*

Drug	Dose	Why
Aspirin first-line, and preferred post-MI	**750–1000 mg every 8 h** for 1–2 weeks, then taper	Choose aspirin over other NSAIDs when pericarditis follows an MI, since NSAIDs may impair infarct healing.
Ibuprofen alternative first-line	**600 mg every 8 h** for 1–2 weeks, then taper	Equivalent efficacy. Duration guided by symptoms and **CRP**, generally 1–2 weeks in uncomplicated disease.
Colchicine add to every case	**0.5 mg daily if < 70 kg** **0.5 mg twice daily if ≥ 70 kg** for **3 months**	First-line **adjunct**, not an alternative. Substantially reduces recurrence. Tapering is not mandatory but may be considered. Reduce dose in renal impairment; expect diarrhea.
Gastric protection	PPI alongside high-dose NSAID	These are large anti-inflammatory doses given for weeks.
Corticosteroids avoid routinely	Low-to-moderate dose only if truly needed	**Associated with more recurrences** and steroid dependence. Reserve for NSAID/colchicine failure, contraindication, or a specific indication such as autoimmune or uremic pericarditis.

FOLLOW-UP & RECURRENCE *CRP is the taper guide*

MONITOR

Track CRP to guide duration — taper only after symptoms resolve **and** CRP normalizes. Restrict strenuous exercise until both settle. Recurrence affects roughly **15–30%**, and is higher if colchicine was omitted.

RECURRENT DISEASE

Aspirin or an NSAID until symptoms resolve, **plus colchicine for 6 months**. Some advocate longer, up to 12–24 months after the last recurrence with gradual tapering, since recurrences follow abrupt discontinuation.

RED FLAGS — ADMIT AND INVESTIGATE *most cases are viral and outpatient; these are not*

ADMIT IF

Fever > 38°C · subacute onset · **large effusion or tamponade** · failure of NSAID after 7 days · **immunosuppression** · oral anticoagulation · trauma · elevated troponin (myopericarditis).

COMPLICATIONS

Tamponade — hypotension, raised JVP, muffled sounds, pulsus paradoxus > 10 mmHg → urgent **pericardiocentesis**. **Constrictive pericarditis** — late, with right-heart failure and a pericardial knock. **Myopericarditis** — troponin rise; restrict exercise, avoid high-dose NSAIDs.

FIND THE CAUSE *most are viral or idiopathic — but look for the ones that change treatment*

Cause	Clue	What changes
Viral / idiopathic the large majority	Preceding viral illness, otherwise well, self-limiting	No extensive workup needed. NSAID + colchicine and follow CRP.
Post-MI	**Early** peri-infarction, or **late Dressler** weeks after	**Use aspirin**, not other NSAIDs, which may impair infarct healing. Avoid steroids.
Uremic	Advanced renal failure, often **no ECG changes**	**Treated with intensified dialysis**, not NSAIDs. A dialysis indication in its own right.
Tuberculous	Endemic exposure, HIV, subacute with weight loss and fever	Needs pericardial fluid or tissue for diagnosis. **High risk of constriction.** Antituberculous therapy.
Malignant	Known cancer, **large or recurrent bloody effusion**	Cytology and drainage. Consider a pericardial window for recurrence.
Autoimmune	Lupus, rheumatoid disease, other connective tissue disease	One of the few settings where **corticosteroids are appropriate** first-line.
Post-cardiac injury	After surgery, ablation, or device implantation	Colchicine has a role in prevention after cardiac surgery.

TAMPONADE — RECOGNIZE AND DECOMPRESS *a clinical diagnosis, not an echo one*

THE PICTURE

Beck triad: hypotension, raised JVP, muffled heart sounds. Plus **pulsus paradoxus > 10 mmHg**, tachycardia, and electrical alternans or low voltage on ECG. Echo shows **diastolic right-heart collapse** and respiratory variation across the valves.

WHAT TO DO

Urgent pericardiocentesis, echo-guided. **Give fluids** to support preload while preparing. **Avoid intubation and positive-pressure ventilation if you can** — it drops preload further and can precipitate arrest. **Never delay drainage for a trial of diuretics.**

PEARLS & PITFALLS

- **Colchicine is not optional.** Adding it to an NSAID is the single most effective step for preventing recurrence, and it is the most commonly omitted part of the prescription.
- **Steroids feel effective and cause relapse.** They are a last resort, not a shortcut.
- Diffuse ST elevation with PR depression and no reciprocal change points away from occlusion — but stay humble.
- **Taper by CRP, not by the calendar.** Stopping while CRP is still elevated invites recurrence.
- **Post-MI, use aspirin** rather than another NSAID.
- A rising troponin means myocardial involvement — reclassify as myopericarditis and change the exercise advice.

References: 2015 ESC Guidelines for the Diagnosis and Management of Pericardial Diseases (Eur Heart J, 2015) · ICAP and CORP/CORP-2 colchicine trials.

Educational aid; verify doses against local protocol, renal function, and patient factors.