

MYO/PERICARDITIS CAUSES:

- Infectious: viral, bacterial, fungal, parasitic
- Non-infectious: autoimmune, neoplastic, metabolic, traumatic, iatrogenic, drug-related, post-ACS

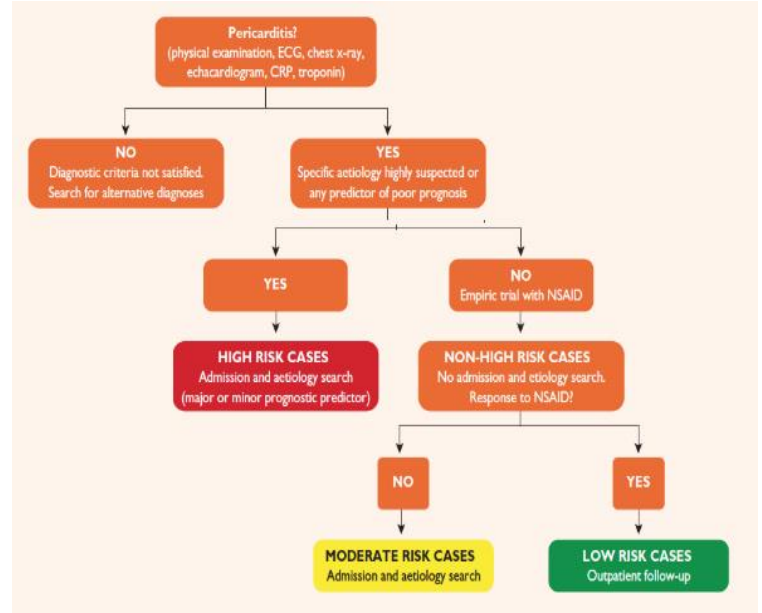
DIAGNOSIS:

- ≥ 2 of:
 - Chest pain
 - Pericardial friction rub
 - ECG changes: ST elevation and/or PR depression
 - New or worsening pericardial effusion
- Additional findings
 - Elevated cardiac biomarkers (trop, CK) indicate myocardial involvement
 - Elevated WBC, ESR, CRP
 - Cardiac inflammation on CT, MRI

GOALS OF THERAPY:

- Prevent morbidity/mortality
 - Hospitalization, effusion, cardiac tamponade, constrictive pericarditis, arrhythmias, recurrence
- Normalize S/S
 - CP, bloodwork, ECG changes etc
- Minimize adverse effects of medications

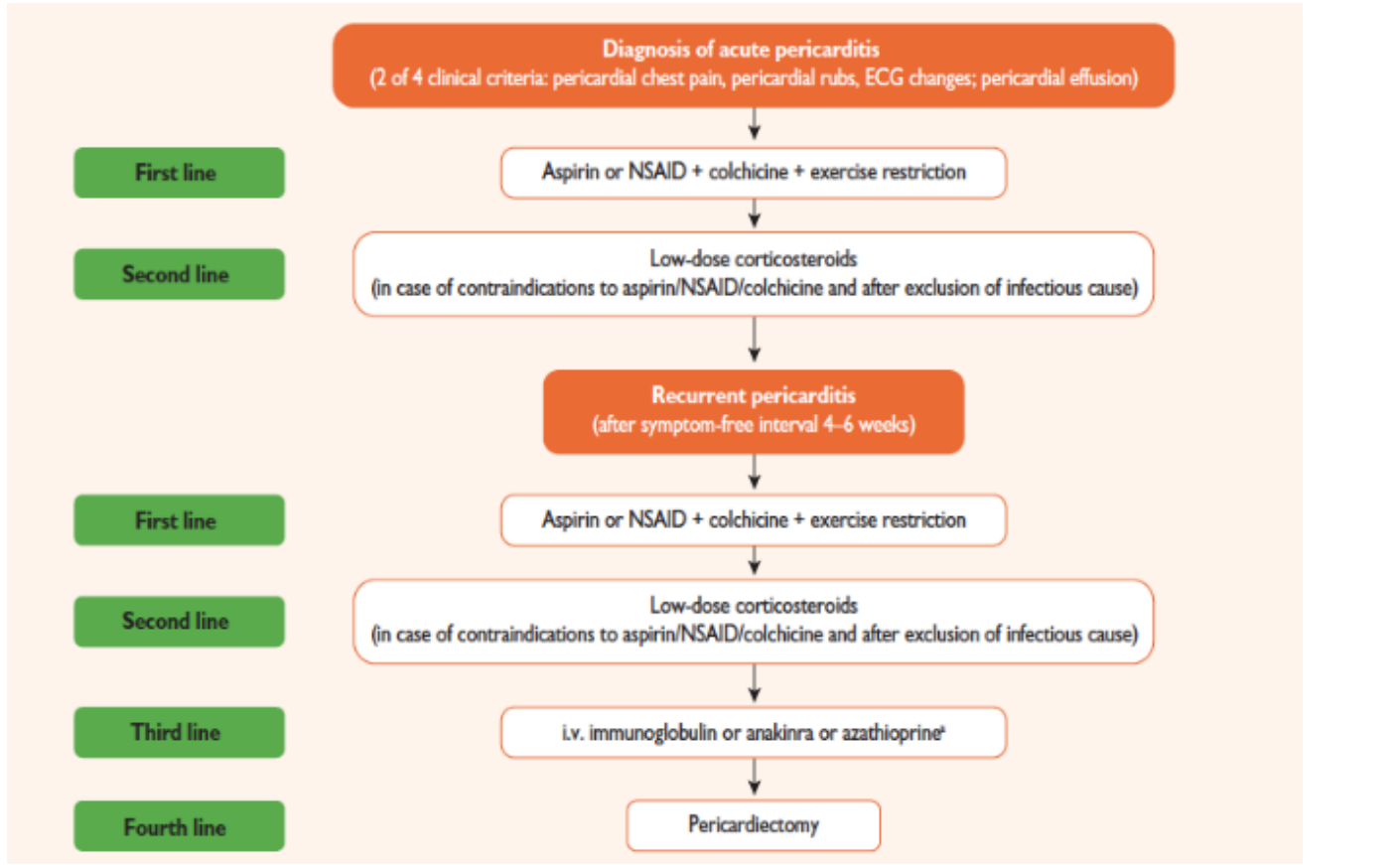
APPROACH TO TREATMENT:



PREDICTORS OF POOR PROGNOSIS:

Major	Minor
<ul style="list-style-type: none"> • Fever > 38°C • Subacute onset • Large pericardial effusion • Cardiac tamponade • Lack of response to ASA or NSAIDs after at least 1 week of therapy 	<ul style="list-style-type: none"> • Myopericarditis • Immunosuppression • Trauma • Oral anticoagulant therapy

TREATMENT ALGORITHM:



TREATMENT OPTIONS:

Drug	Dose	Duration	Tapering	Considerations	
ASA	650 – 1000 mg TID – QID	<ul style="list-style-type: none"> Acute: 1-2 wk Recurrent: \geq 2-4 wk FOLLOWED BY TAPER	<ul style="list-style-type: none"> Reduce dose every 1-2 days over 1-2 weeks Slow if sx return 	1 st line CVD	
Ibuprofen	600 mg TID – QID			1 st line most patients	CI: PUD/ GIB/ bleed risk on OAC
Indomethacin	25 – 50 mg TID				
Prednisone	0.2 – 0.5 mg/kg/day	2-4 weeks followed by taper	Data conflicting on optimal dose/duration/tapering	<ul style="list-style-type: none"> CI to NSAIDs Underlying autoimmune dx Risk of infection 	
Colchicine	0.3 – 1.2 mg/day (depending on weight, tolerability, ClCr)	<ul style="list-style-type: none"> Acute: 3 mo Recurrent: 6 mo 	<ul style="list-style-type: none"> Discontinue once off other drugs Tapering not mandatory 	ADJUNCT to ASA/ NSAIDs/ prednisone	

IN ADDITION TO ACUTE PERICARDITIS TREATMENT:

- Specific therapy aimed at cause/complications
- Management of clinical manifestations
 - Heart failure
 - Diuretics, ACEI/ARB, B-blockers, spironolactone
 - Arrhythmias
 - Amiodarone, B-blockers, CCBs, other

GASTROPROTECTION:

- Risk factors:
 - PUD history
 - Age > 65 years
 - Concurrent use of ASA, anticoagulants, corticosteroids
- Short-term PPI at standard dose or high dose H₂RA should be considered w/ NSAID

NON PHARM:

- Limit to normal sedentary activities until asymptomatic and have normalization of ECG & biomarkers
- Athletes advised to refrain from strenuous activity
 - X 3 months pericarditis
 - X 6 months if myocardial involvement

SURGICAL INTERVENTIONS:

- Pericardial drainage (for pericardial effusion)
- Pericardiectomy/ectomy
 - Constrictive pericarditis
 - Cases refractory to medical therapy

TREATMENT DURATION/MONITORING:

- Expect improvement in sx in <72 h
- If no improvement within 1 wk consider causes other than idiopathic, viral
- Consider weekly serum CRP to guide txt length & assess response (no data to support this, Class IIa C)

RECURRENTS:

- Peri/myocarditis occurring after a sx-free period of \geq 4-6 weeks
- Occurrence: 30%
- Treatment:
 - Target underlying cause if known
 - Retrial of ASA/NSAIDs PLUS colchicine
 - Colchicine improved response to therapy, remission rates, prevents recurrences
 - \pm corticosteroids for more rapid sx control
 - Chronicity, more recurrences, side effects

REFRACTORY CASES:

- Corticosteroid-dependent (>25 mg/d prednisone or equivalent) without response to colchicine
- Paucity of evidence
- Case by case assessment
 - IV immunoglobulin
 - Anakinra (IL-1B receptor antagonist)
 - Azathioprine