



ΚΑΡΔΙΟΛΟΓΙΚΗ ΕΤΑΙΡΕΙΑ
ΒΟΡΕΙΟΥ ΕΛΛΑΔΟΣ



Α' ΠΑΝΕΛΛΗΝΙΑΚΗ
ΚΑΡΔΙΟΛΟΓΙΚΗ ΚΛΙΝΙΚΗ
Π.Γ.Ν. ΑΧΕΠΑ

*Σύγχρονες Εξελίξεις
στις Μυοκαρδιοπάθειες
5-6 Δεκεμβρίου 2025
Ξενοδοχείο MonAsty*

*Updates in
Cardiomyopathies
December 5-6, 2025
MonAsty Hotel
Thessaloniki / Greece*

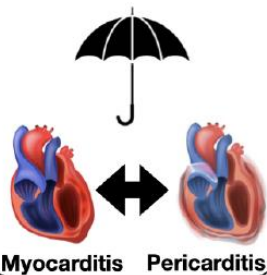


Myocarditis Management According to the New Guidelines

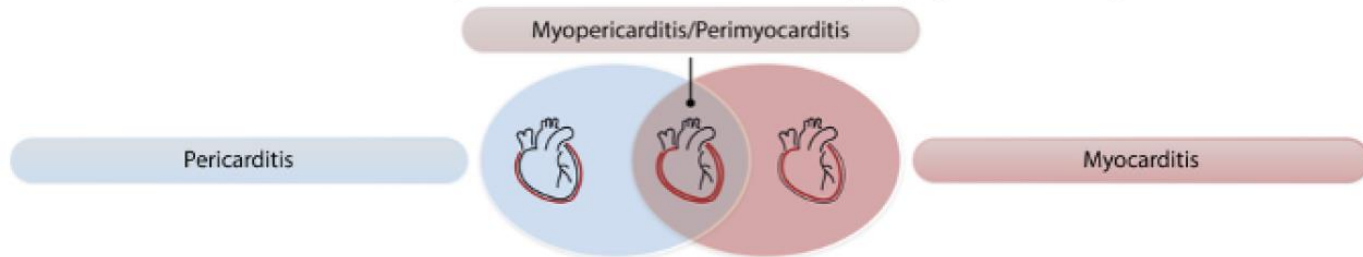
Inflammatory Myopericardial Syndrome

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Cardiologist

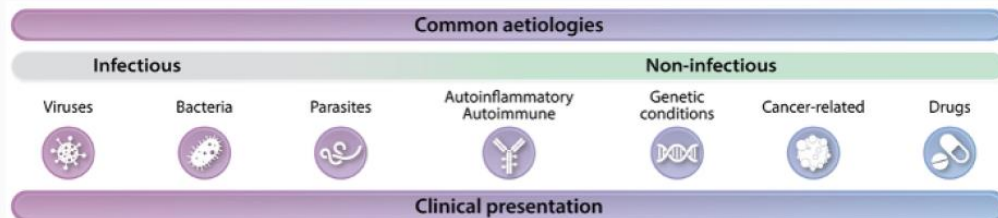
1. Definition of IMPS and spectrum of disease



Umbrella: IMPS - The spectrum of the inflammatory myopericardial syndrome



1. Common aetiologies



2. Anatomical contiguity

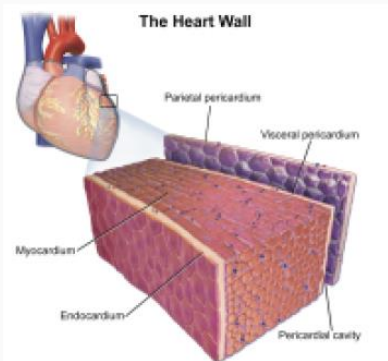


Figure 1

Central illustration of the ESC guidelines on myocarditis and pericarditis

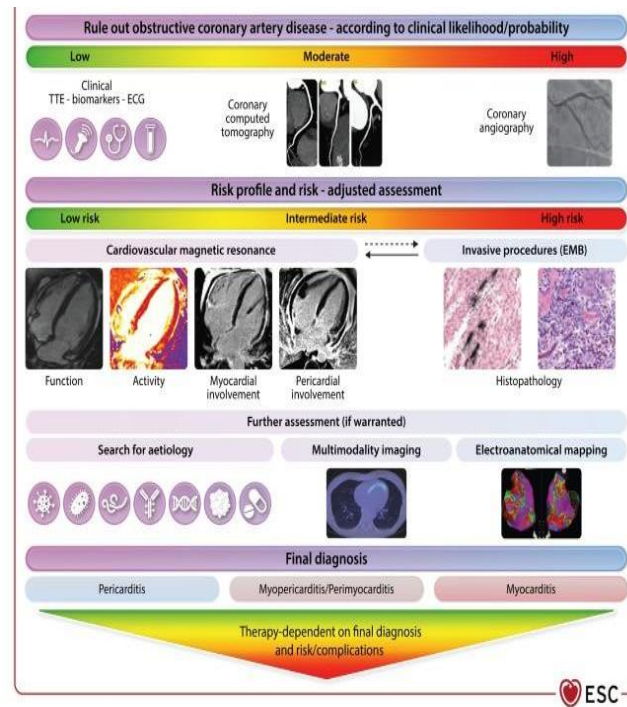
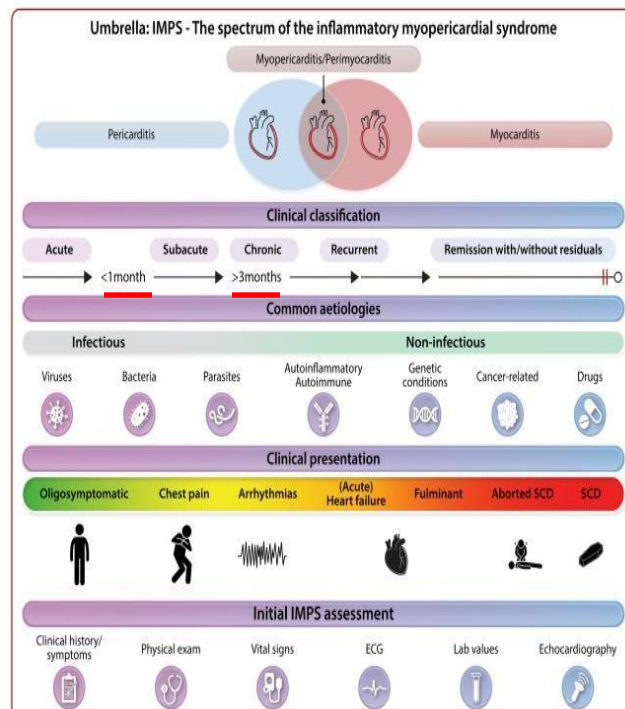
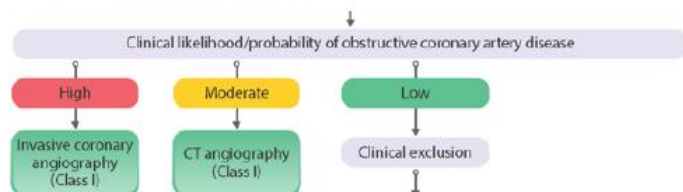


Figure 9

Diagnostic algorithm for acute chest pain presentation

1 – exclude ACS



2 - risk stratification



High risk	Intermediate risk
• Acute I⁺cardiogenic shock • Dyspnoea NYHA III-IV refractory to medical therapy • Cardiac arrest/syncope^a • Ventricular fibrillation/sustained ventricular tachycardia^a • High-level AV block^a	• Non/progressive dyspnoea • Non-sustained ventricular arrhythmias • Persistent release or relapsing troponin
Imaging criteria: • Newly reduced LVEF (<40%)^a • Extensive LGE on CMR^a	Imaging criteria: • Newly mildly reduced LVEF (41%-49%) and/or WMA • Preserved LVEF (≥50%) and LGE ≥2 segments on CMR

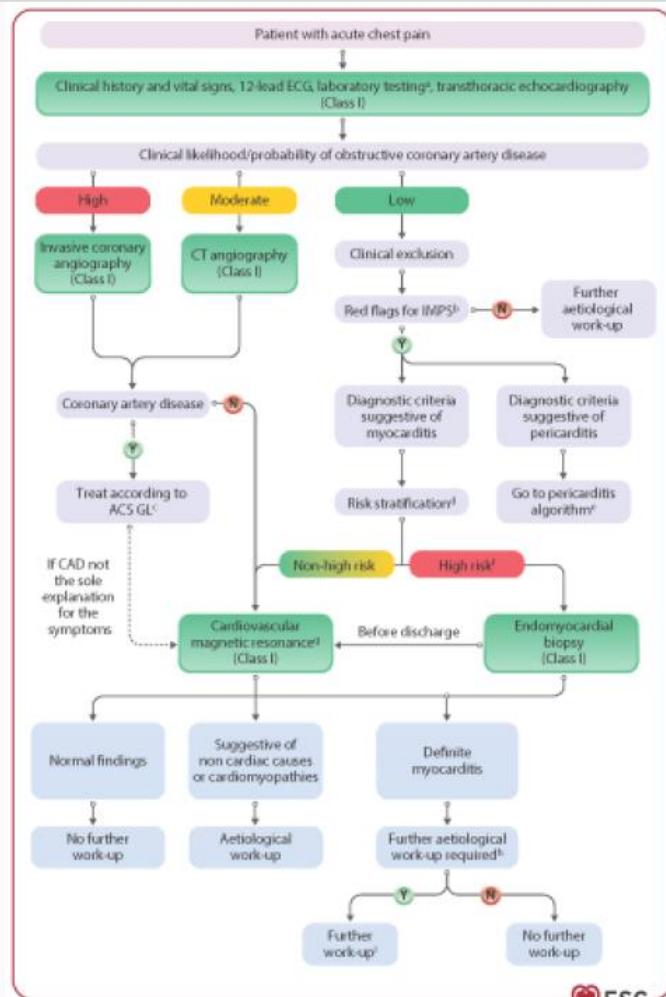


Figure 10

Diagnostic algorithm for acute heart failure presentation

- 1 - heart failure management
- 2 - exclude other aetiologies (CHAMPIT score)
- 3 - risk stratification

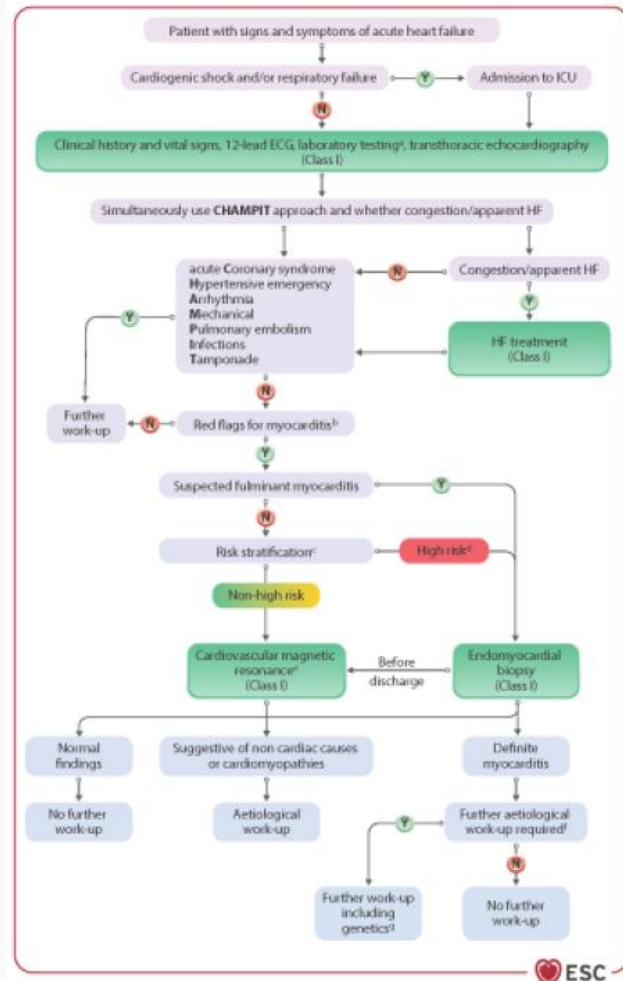
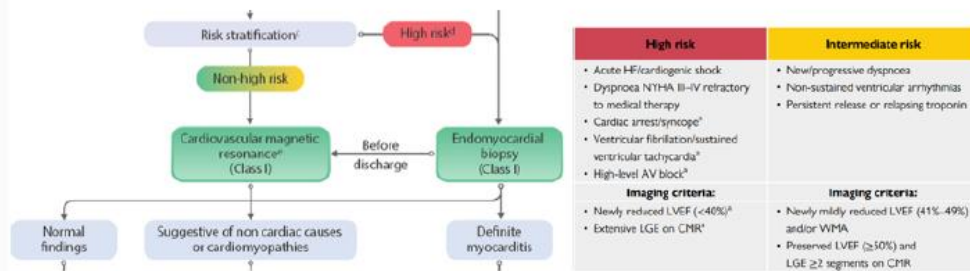
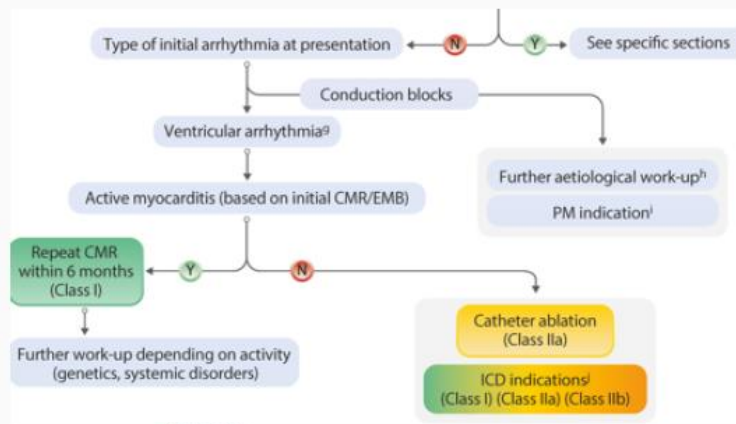


Figure 11

Diagnostic algorithm for arrhythmia presentation

- 1 - arrhythmia management
- 2 - exclude CAD
- 3 - risk stratification
- 4 - secondary prevention

High risk	Intermediate risk
• Acute HF/cardiogenic shock • Dyspnoea NYHA III-IV refractory to medical therapy • Cardiac arrest/syncope^a • Ventricular fibrillation/sustained ventricular tachycardia^a • High-level AV block^a	• New/progressive dyspnoea • Non-sustained ventricular arrhythmias • Persistent release or relapsing troponin
Imaging criteria: • Newly reduced LVEF (<40%)^a • Extensive LGE on CMR^a	Imaging criteria: • Newly mildly reduced LVEF (41%-49%) and/or WMA • Preserved LVEF (≥50%) and LGE ≥2 segments on CMR



Diagnostic criteria and classification for inflammatory myopericardial syndrome

IMPS		
If diagnostic criteria for myocarditis and/or pericarditis are fulfilled		
	Myocarditis	Pericarditis
★ Definite	Clinical presentation and CMR- or EMB-proven	Clinical presentation with >1 additional criterion
★ Possible	Clinical presentation with at least 1 additional criterion CMR- or EMB-uncertain or not available	Clinical presentation with 1 additional criterion
★ Unlikely/ Rejected	Only clinical presentation without additional criteria	Only clinical presentation without additional criteria
Additional criteria beyond clinical presentations		
	Myocarditis	Pericarditis
Clinical	Non-specific findings	Pericardial rubs
ECG	ST-T changes	PR depression, widespread, ST-segment elevation
Biomarkers	Troponin elevation	CRP elevation
Imaging	Abnormal strain, wall motion, reduced EF Myocardial oedema and/or LGE (CMR findings)	New or worsening pericardial effusion Pericardial oedema and/or LGE (CMR findings)

Red flags for the clinical diagnosis of myocarditis and pericarditis

Myocarditis	Pericarditis
Recent or concomitant flu-like syndrome or gastroenteritis	Recent or concomitant flu-like syndrome or gastroenteritis
Infarct-like chest pain	Pleuritic/infarct-like chest pain
Palpitations	Right HF symptoms and signs of constriction
HF symptoms	Fever
ECG changes	Pericardial rubs
Ventricular arrhythmias (isolated, complex)	CRP elevation
Syncope	Pericardial effusion
Haemodynamic instability	Pleural effusion
Elevated markers of myocardial lesion (hs-Tn, CK-MB elevation)	Polyserositis
Elevated markers of HF (NT-proBNP)	CMR imaging with pericardial oedema and/or LGE
Abnormal wall motion, increased wall thickness and/or impaired systolic function on imaging	
CMR imaging with myocardial oedema and/or LGE	

Clinical risk stratification to guide work-up in inflammatory myopericardial syndrome

Risk	High risk	Intermediate risk	Low risk
Myocarditis	-Acute HF/cardiogenic shock -Dyspnoea NYHA III-IV refractory to medical therapy -Cardiac arrest/syncope -Ventricular fibrillation/sustained ventricular tachycardia -High-level AV block Imaging criteria: -Newly reduced LVEF (<40%) -Extensive LGE on CMR	-New/progressive dyspnoea -Non-sustained ventricular arrhythmias -Persistent release or relapsing troponin Imaging criteria: -Newly mildly reduced LVEF (41%–49%) and/or WMA -Preserved LVEF (≥50%) and LGE ≥2 segments on CMR	-Stable symptoms or oligosymptomatic Imaging criteria: -Preserved LVEF (≥50%) without LGE or limited LGE (<2 segments) on CMR
Pericarditis	-Signs and symptoms of cardiac tamponade -Fever (temperature >38°C) -Effusive–constrictive pericarditis -Failure of NSAID therapy -Incessant pericarditis Imaging criteria: -Large PEff (>20 mm end-diastole) -Cardiac tamponade -Extensive pericardial LGE on CMR	-Signs and symptoms of right heart failure Imaging criteria: -Moderate–large PEff (10–20 mm end-diastole) -Constrictive physiology regardless of the size of the effusion	-Response to adequate therapy within 1–2 weeks Imaging criteria: -Absence or mild PEff -Absence of pericardial LGE on CMR

Figure 5

Diagnostic algorithm and triage for inpatient myocarditis

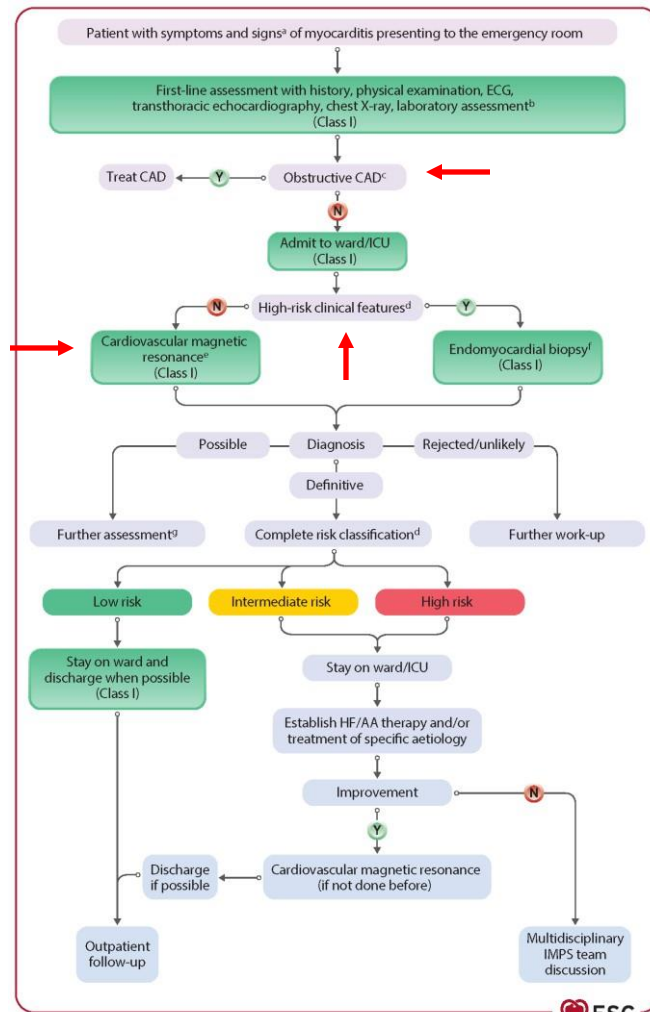


Figure 6

Diagnostic algorithm and triage for outpatient myocarditis

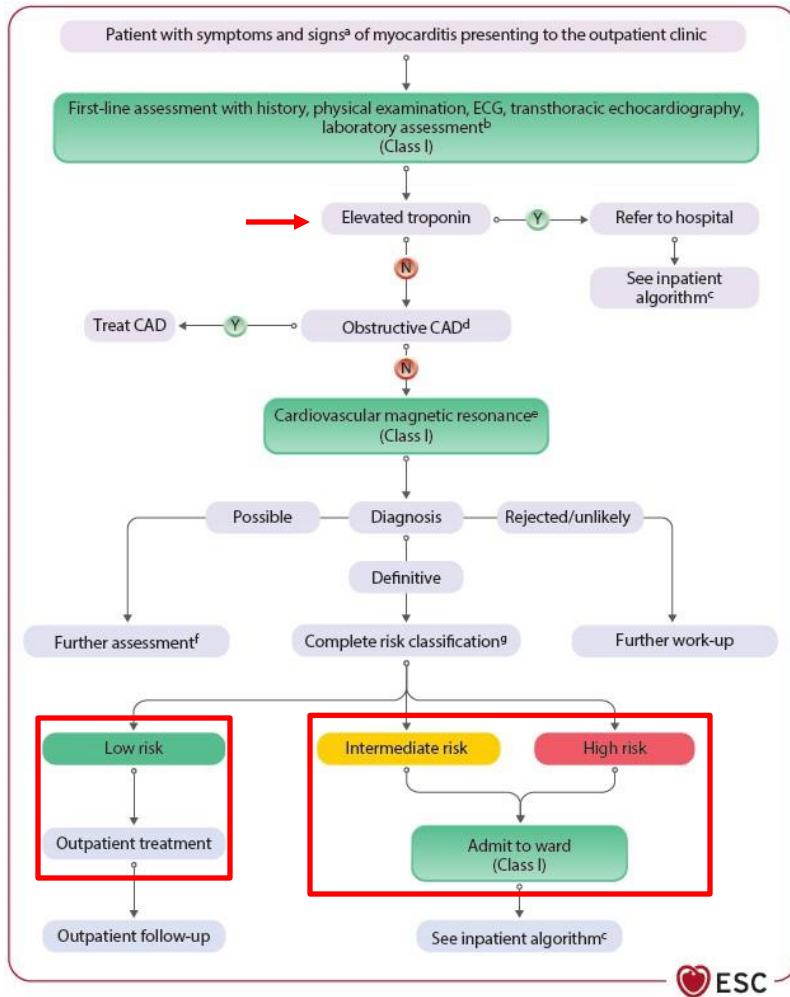


Figure 7

Diagnostic algorithm and triage for pericarditis

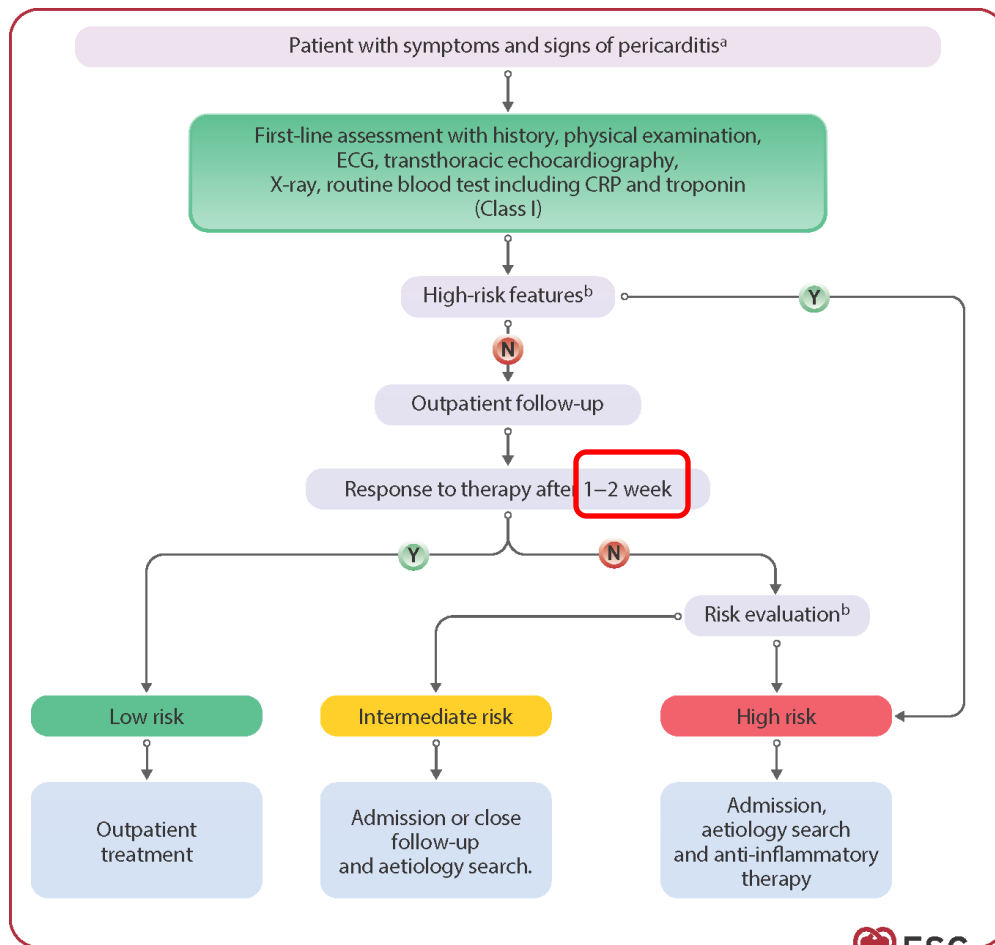
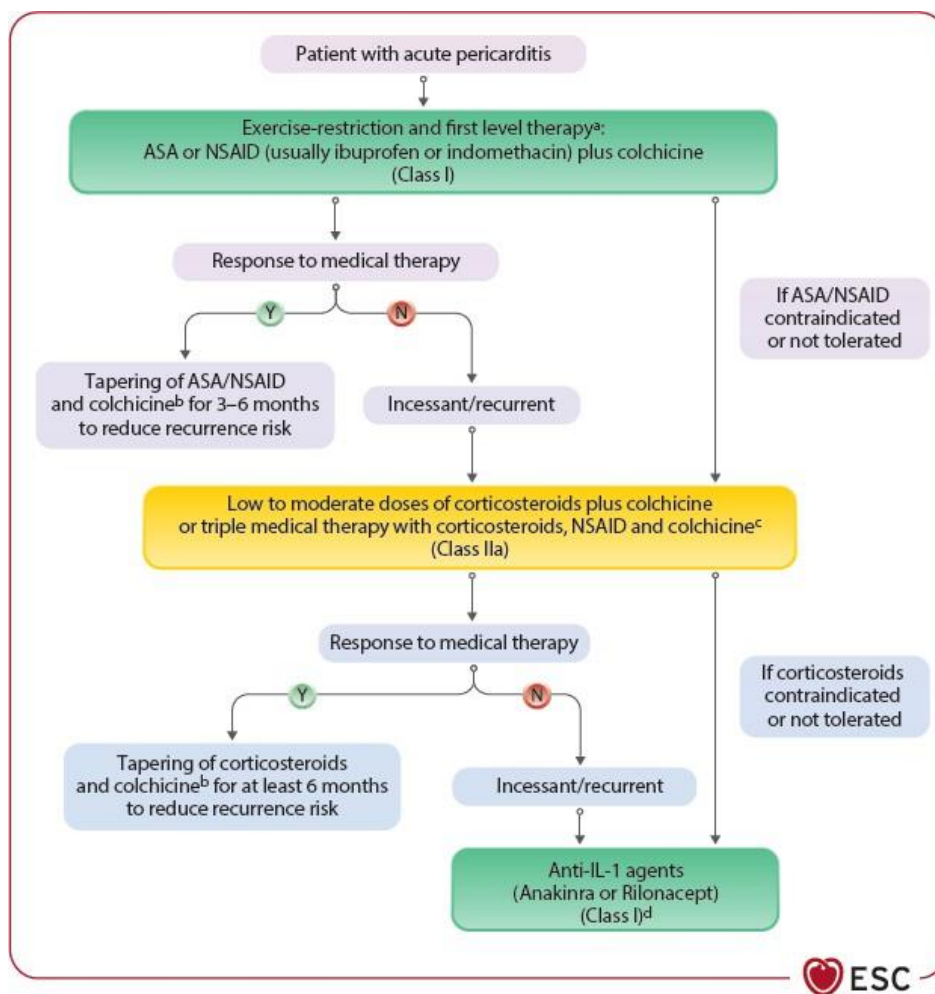


Figure 16

Proposed algorithm of medical therapy for pericarditis in adults (not including interventional therapies and pericardiectomy)



Specific initial dosing and duration of therapy for acute and recurrent pericarditis

Therapy	Dosing	Duration	Tapering
Aspirin	750–1000 mg 3 times daily	1–2 weeks	Decrease by 250 mg every 1–2 weeks
Ibuprofen	600–800 mg 3 times daily	1–2 weeks	Decrease by 200 mg every 1–2 weeks
Indomethacin	25–50 mg 3 times daily	1–2 weeks	Decrease by 25 mg every 1–2 weeks
Colchicine	0.5 mg once daily (<70 kg or severe renal impairment) or ★ 0.5 mg twice daily	3–6 months	Not required
Prednisone	0.2–0.5 mg/kg/day	2–4 weeks	Several months
Treatment for recurrences only			
Azathioprine ★	Starting with 1 mg/kg/day then gradually increased to 2–3 mg/kg/day	Several months	Several months
IVIG ★	400–500 mg/kg i.v. daily for 5 days	5 days	Not required
Anakinra	1–2 mg/kg/day up to 100 mg/day in adults	At least 6 months	Needed (at least 3 to 6 months)
Rilonacept	320 mg once daily followed by 160 mg weekly	>12 months	Unknown

Recommendations for medical therapy in pericarditis (1)

Recommendations	Class	Level
Colchicine is recommended as first-line therapy in patients with pericarditis as an adjunct to aspirin/NSAID or corticosteroid therapy to reduce subsequent recurrences	I	A
Anti-IL-1 agents (anakinra or rilonacept) are recommended for patients with recurrent pericarditis after failure of first-line therapies and corticosteroids and elevation of CRP levels to reduce recurrences and allow corticosteroid withdrawal.	I	A
High-dose aspirin or NSAIDs with <u>proton pump inhibitors</u> are recommended as first-line therapy in patients with <u>pericarditis</u> to control symptoms and reduce recurrences.	I	B
A <u>β-blocker</u> should be considered in symptomatic patients, despite full anti-inflammatory therapy, and heart rate at <u>rest >75 bpm</u> in order to improve symptoms control.	IIa	C
Anti-IL-1 agents (anakinra or rilonacept) should be considered in cases of incessant/recurrent pericarditis with evidence of pericardial inflammation on CMR after failure, contraindications, and intolerance to first-line therapies and corticosteroids regardless of CRP levels to reduce recurrences and allow corticosteroid withdrawal.	IIa	C

Recommendations for medical therapy in pericarditis (2)

Recommendations (Continued)	Class	Level
Low- to medium-dose corticosteroids should be considered for patients with pericarditis only in cases of contraindication/failure of aspirin/NSAIDs and colchicine, or when there is a specific indication to control symptoms and reduce recurrences.	IIa	C
Hydroxychloroquine may be considered in patients with recurrent pericarditis refractory to standard therapy (including corticosteroids and anti-IL-1 agents) to prolong recurrence-free survival.	IIb	B
Corticosteroids are not recommended as the first option for patients with pericarditis therapy without a specific indication.	III	C

Recommendations for interventional techniques in pericarditis ESC

Recommendations	Class	Level
Pericardiocentesis (echocardiography-, CT-, or fluoroscopy-guided) is recommended for cardiac tamponade, or suspected bacterial or neoplastic pericarditis, or symptomatic moderate to large pericardial effusion despite medical therapy.	I	C
Surgical pericardial drainage is recommended in patients with pericardial effusion when percutaneous pericardiocentesis is not feasible or with purulent pericardial effusion to allow complete drainage and to prevent constriction.	I	C
Surgical pleuro-pericardial window is recommended in patients with relapsing pericardial effusion despite medical therapy.	I	C

Recommendations for surgical therapy

Recommendations	Class	Level
Surgical pericardiectomy is recommended in patients with chronic pericardial constriction or persistent constrictive pericarditis despite medical therapy to improve symptoms and survival.	I	C
Tricuspid valve repair is recommended in patients with pericardial constriction and severe tricuspid valve regurgitation to improve symptoms and survival.	I	C

Figure 19

Triage and management of pericardial effusion.

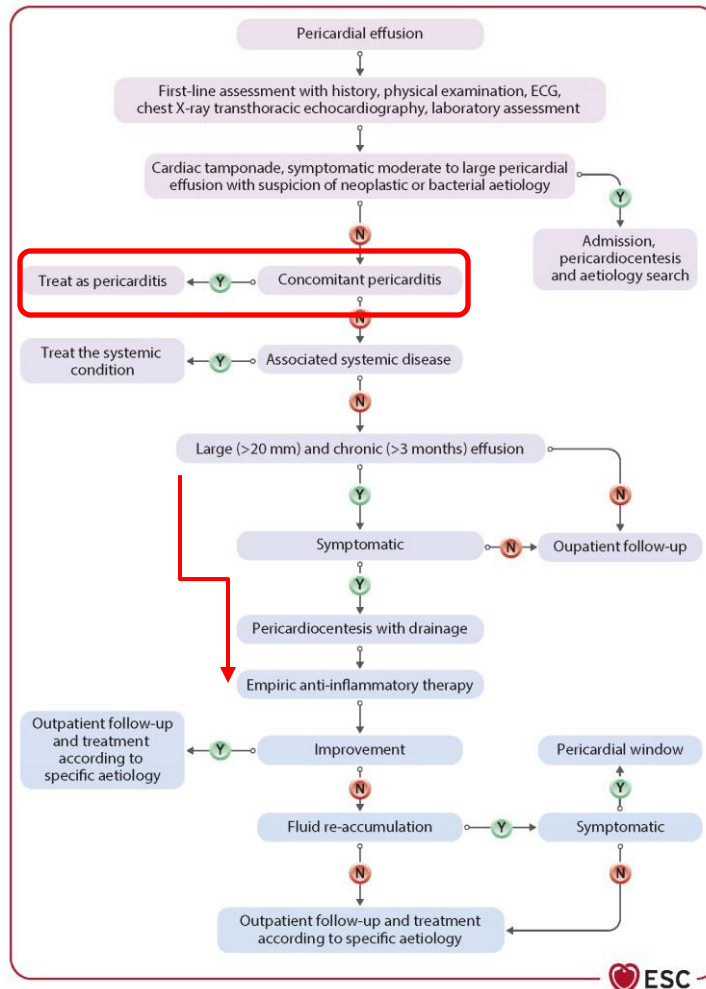


Figure 12

Management of cardiac tamponade

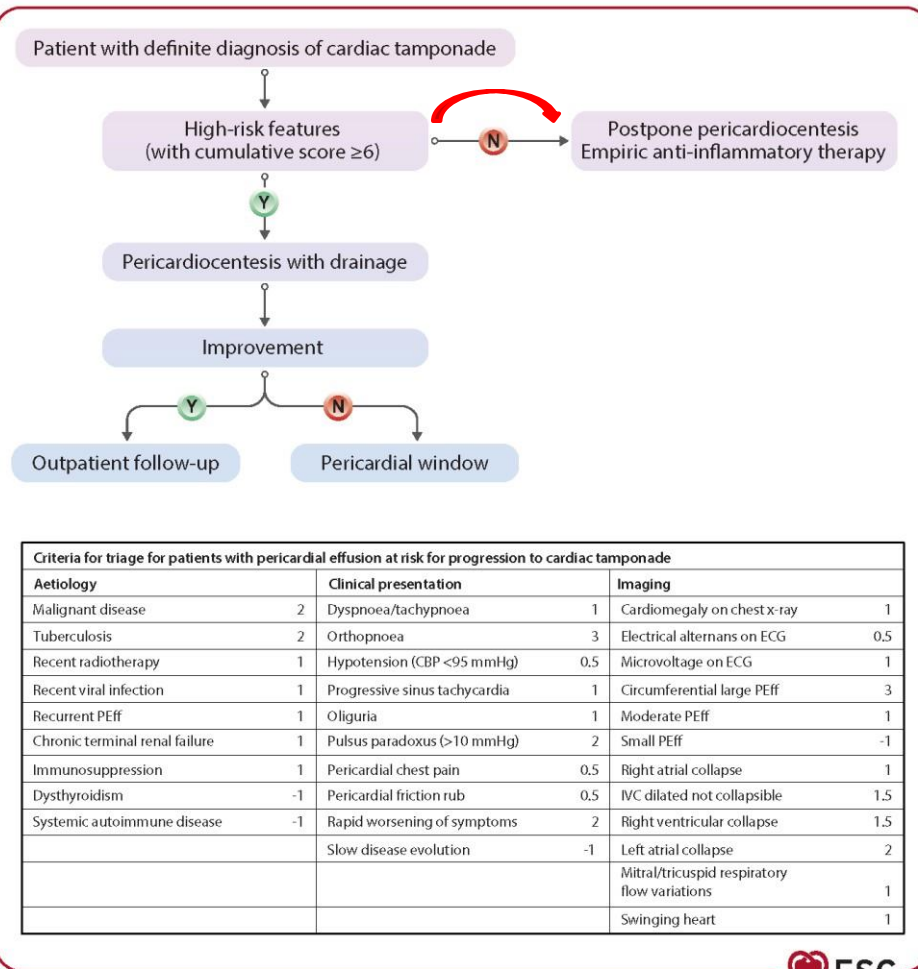
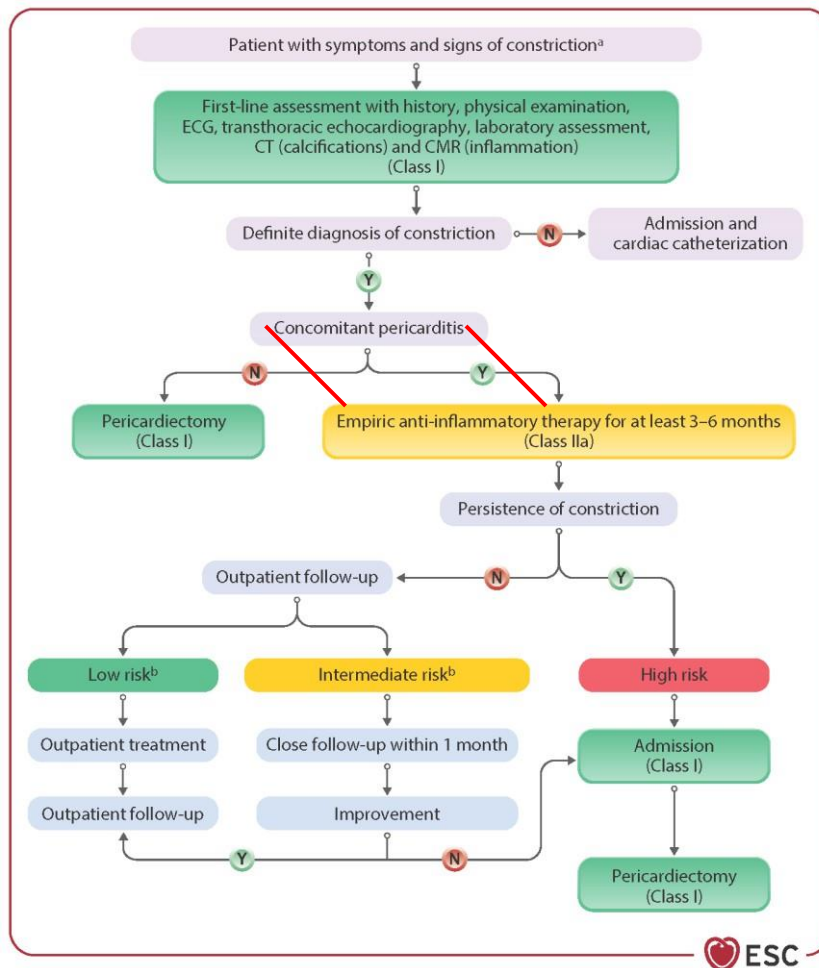


Figure 13

Management of constriction



Follow-up in inflammatory myopericardial syndromes after discharge

		Within 1 month	Within 3–6 months	12 months	>1 year and long-term FU
Clinical evaluation and ECG	Myocarditis	X	X	X	X
	Pericarditis	X	X	X	X
Biomarkers (Tnl, CRP)	Myocarditis	X	X	(X)	(X)
	Pericarditis	X	X	(X)	(X)
Rhythm (stress and/or Holter-ECG)	Myocarditis	-	X	(X)	(X)
	Pericarditis	-	-	-	-
Imaging Myocarditis	TTE	X		X	X
	CMR	X		X	X
Imaging Pericarditis	TTE	X		X	X
	CMR	(X)		(X)	(X)

Recommendations for physical activity and myocarditis/pericarditis

Recommendations	Class	Level
Restriction of physical exercise until remission, for at least 1 month, is recommended in athletes and non-athletes after IMPS using an individualized approach to accelerate recovery.	I	C

Thank you for your attention