31 GIORNATE CARDIOLOGICHE TORINESI

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THE HEART IS ON FIRE- WHAT TO DO?

Pragmatic approach to pericarditis

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**Disclosures: Advisory Board member for SOBI and Kiniksa*

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THE HEART IS ON FIRE- PERICARDITIS

Pragmatic approach in 10 questions

1. How to make the diagnosis?
2. What are the main causes?
3. Who should be admitted?
4. How to treat pericarditis?
5. How to use NSAIDs?
6. When to use colchicine?
7. How to use corticosteroids?
8. When to use alternative therapies?
9. What complications can be anticipated?
10. What is the risk of constriction?

1. How to make the diagnosis?

Pericarditis	Definition and diagnostic criteria
Acute	Inflammatory pericardial syndrome to be diagnosed with at least 2 of the 4 following criteria: 1. Pericarditic chest pain 2. Pericardial rubs 3. New widespread ST elevation or PR depression on ECG 4. Pericardial effusion (new or worsening) Additional supporting findings: Elevation of markers of inflammation (i.e. C-reactive protein, erythrocyte sedimentation rate and white blood cell count) Evidence of pericardial inflammation by an imaging technique (computed tomography, cardiac magnetic resonance)

Clinical criteria

Biomarkers

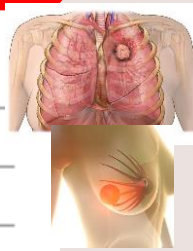
Imaging

RECURRENT PERICARDITIS IF A SYMPTOM FREE INTERVAL > 4-6 weeks
or
INCESSANT PERICARDITIS IF SYMPTOM FREE TIME < 4-6 weeks

2015 ESC Guidelines

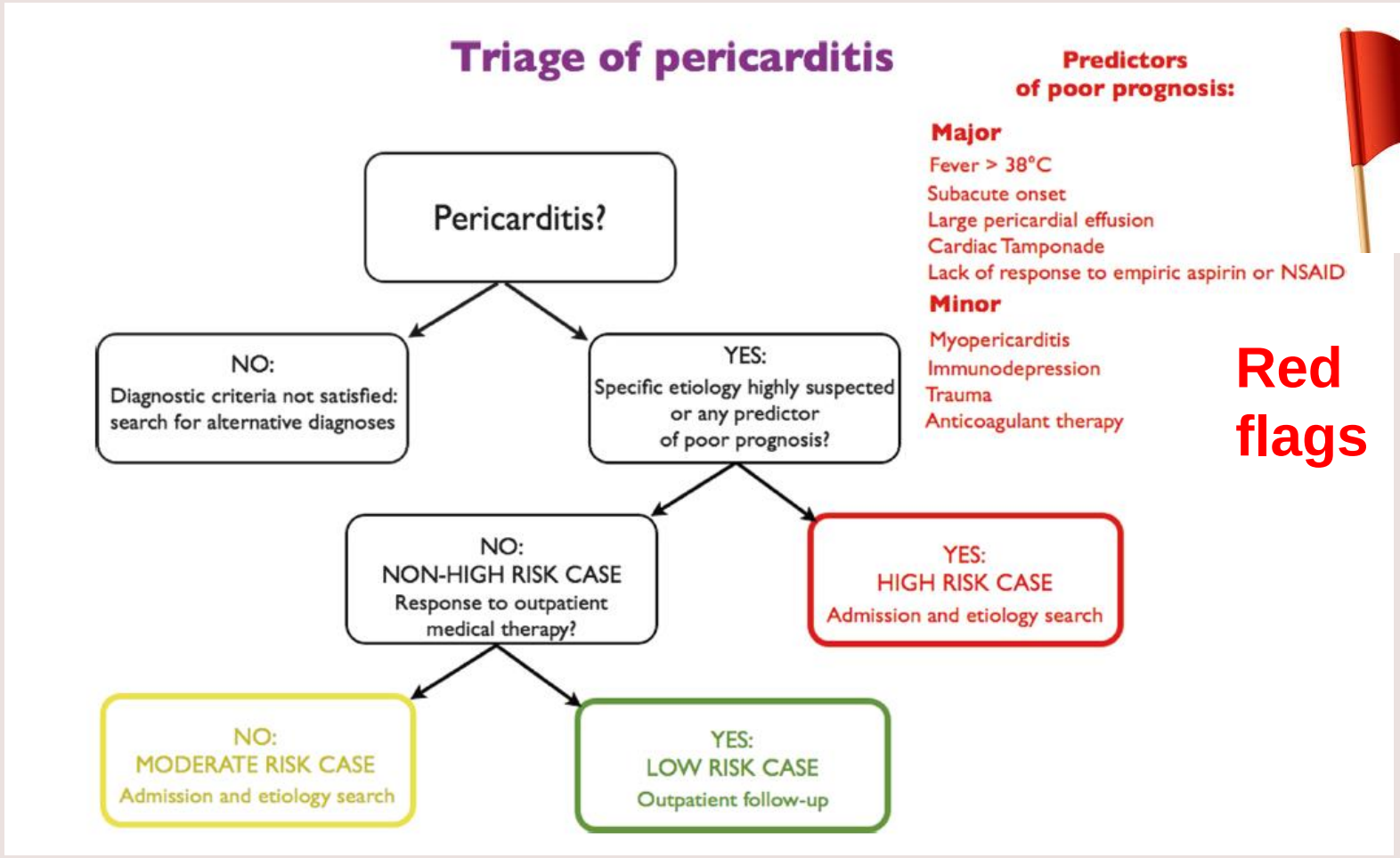
2. What are the main causes?

	Permanyer-Miralda (Spain)	Zayas (Spain)	Imazio (Italy)	Reuter[a] (South Africa)	Gouriet (France)
Patients (*n*)	231	100	453	233	933
Years	1977–1983	1991–1993	1996–2004	1995–2001	2007–2012
Geographic area	Western Europe	Western Europe	Western Europe	Africa	Western Europe
Idiopathic	199 (86.0 %)	78 (78.0 %)	377 (83.2 %)	32 (13.7 %)	516 (55.0 %)
Specific aetiology	32 (14.0 %)	22 (22.0 %)	76 (16.8 %)	201 (86.3 %)	417 (46.0 %)
5-10% Neoplastic	13 (5.6 %)	7 (7.0 %)	23 (5.1 %)	22 (9.4 %)	85 (8.9 %)
<5% Tuberculosis	9 (3.9 %)	4 (4.0 %)	17 (3.8 %)	161 (69.5 %)	(<1 %)
5-20% Autoimmune	4 (1.7 %)	3 (3.0 %)	33 (7.3 %)	12 (5.2 %)	197 (21 %)
<5% Purulent	2 (0.9 %)	1 (1.0 %)	3 (0.7 %)	5 (2.1 %)	29 (3.0 %)



Imazio M. Myopericardial Diseases Springer 2016

3. Who should be admitted?



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4. How to treat pericarditis?

First level tx: Aspirin or NSAID plus colchicine

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Second level tx: Corticosteroids plus colchicine

↓

Third level tx: Aspirin/NSAID plus colchicine and Corticosteroids (Triple therapy)

↓

Fourth level tx: Use of alternative drugs (e.g. azathioprine or IVIG or anakinra)

↓

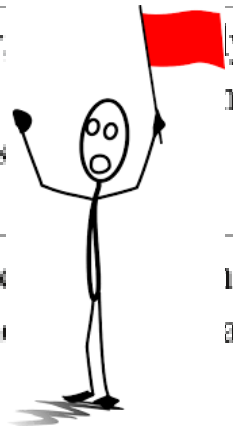
Fifth level tx: Pericardiectomy

5. How to use NSAIDs?

Drug	Usual dosing	Duration	Tapering
Aspirin	750–1000 mg every 8 h	1–2 weeks	
Ibuprofen	600 mg every 8 h	1–2 weeks	
Colchicine	0.5 mg once (<70 kg) or 0.5 mg BID (≥70 kg)	3 months	Not mandatory. y 0.5 mg every other day (<70 ıg once (≥70 kg) in the last week

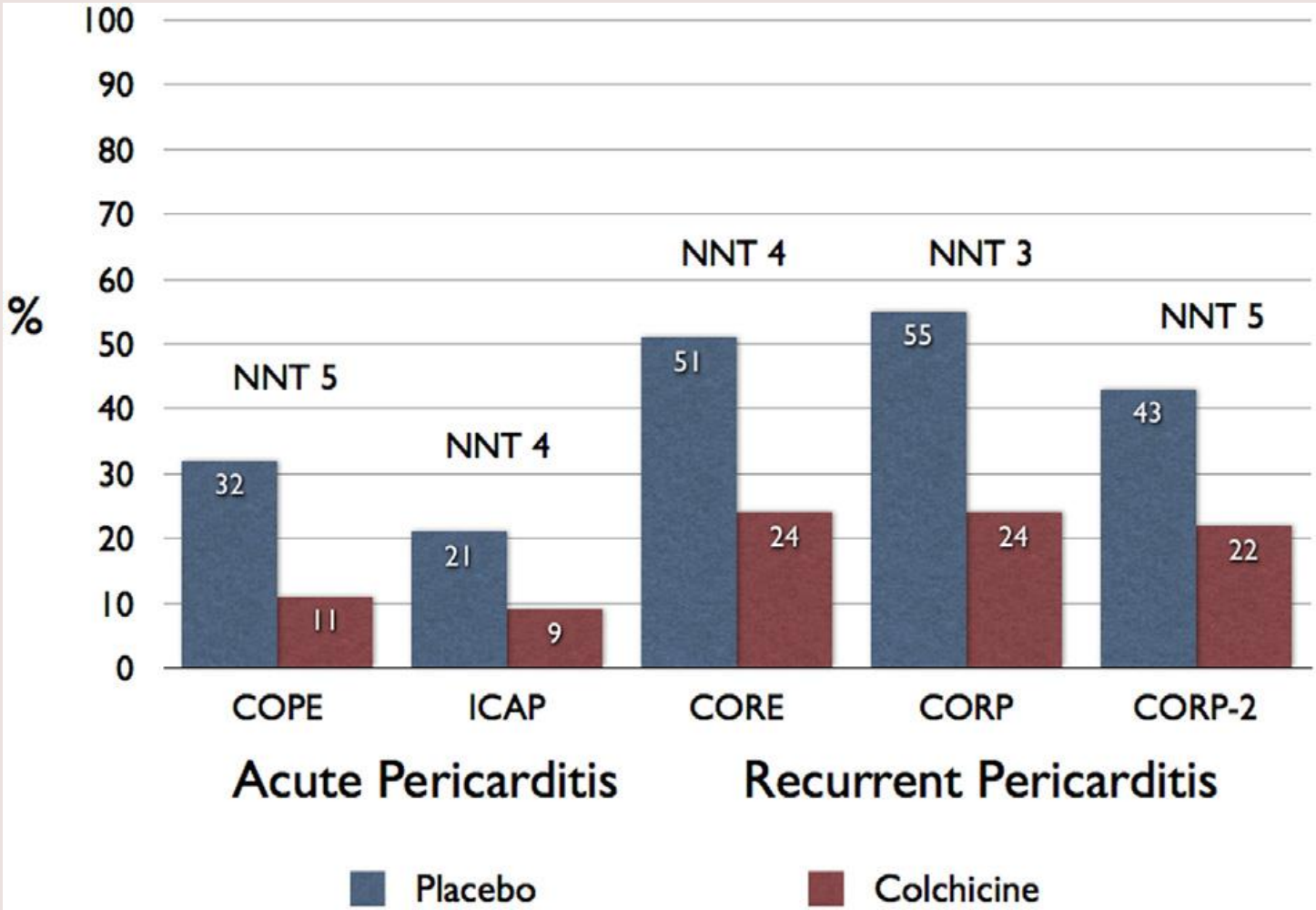
Therapy duration is individualized when guided by symptoms an ıalization: keep the attack dose and taper only if asymptomatic and CRP is normaliz a recommendation, LOE B)

1. Proper dosing and times
2. Add colchicine on top
3. Consider tapering



6. When to use colchicine?

Registred indication in Italy from April 2017:
No more off-label

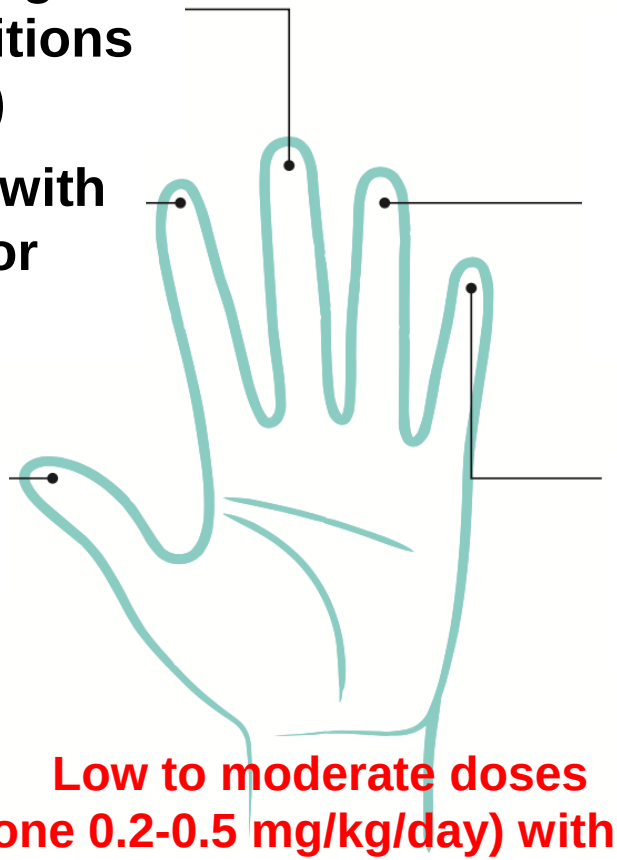


7. How to use corticosteroids?

The 5 indications to corticosteroids in pericarditis

Specific diseases (e.g. rheumatological conditions on steroids, PPS)

As combined therapy (with NSAID/colchicine) for recurrences



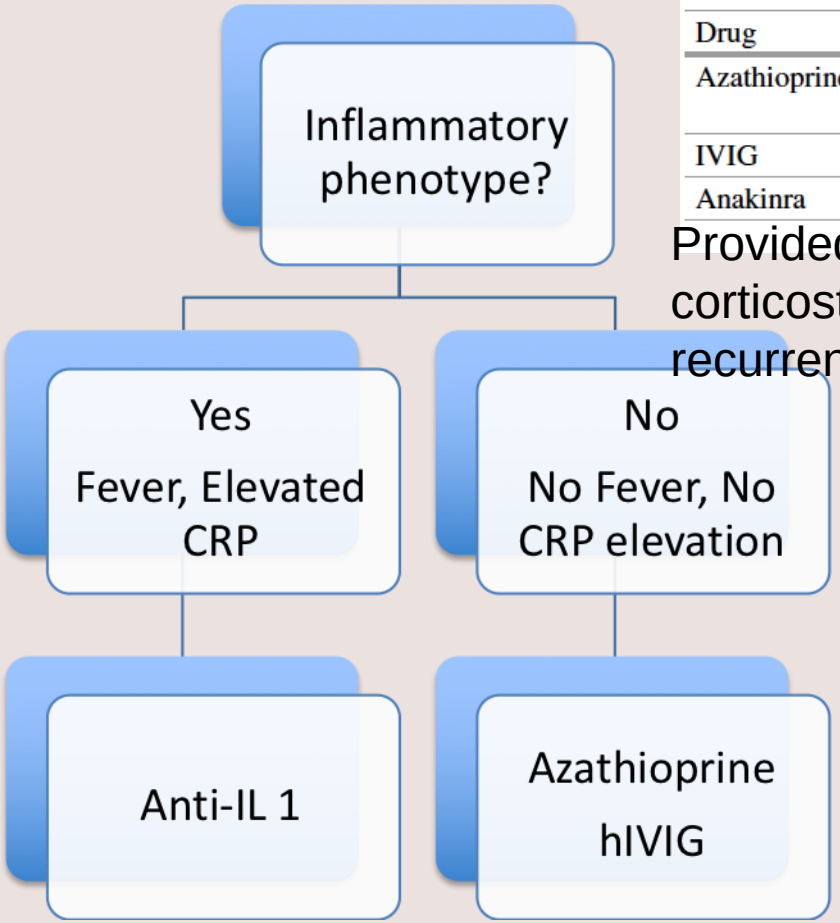
Specific physiological conditions or concomitant diseases (e.g. pregnancy, renal failure)

Contraindications or failure of ASA/NSAID

Concomitant therapies (e.g. oral anticoagulants)

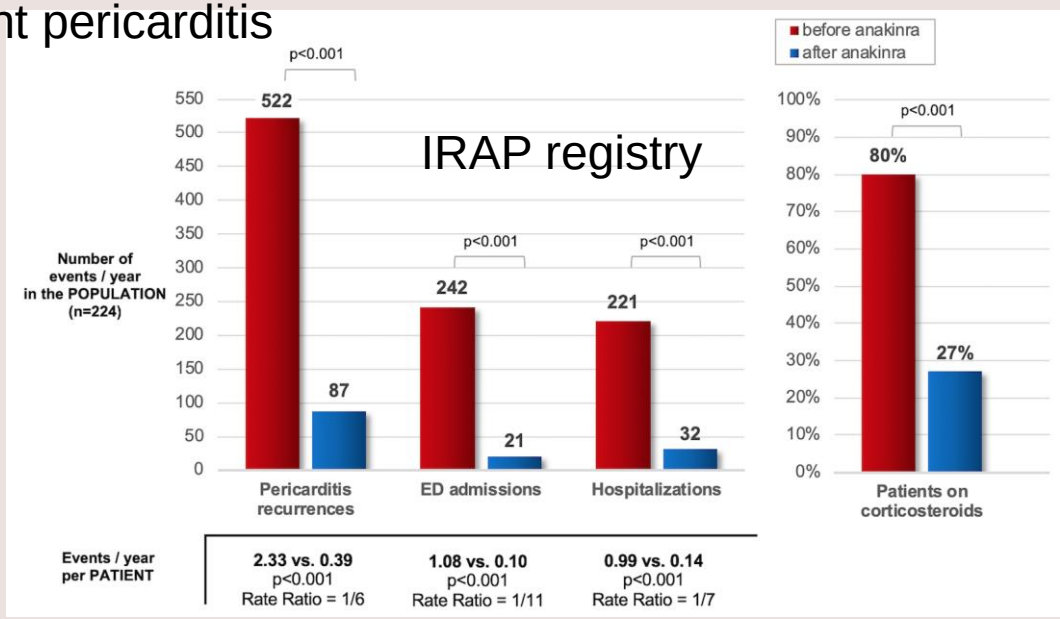
Low to moderate doses
(e.g. prednisone 0.2-0.5 mg/kg/day) with slow tapering

8. When to use alternative therapies?



Drug	Dosing
Azathioprine	Starting with 1 mg/kg day then gradually increased to 2–3 mg/kg/day for several months
IVIG	400-500 mg/kg/day for 5 days
Anakinra	1–2 mg/kg/day up to 100 mg/day in adults for several months

Provided by SSN according to Law 648/1196: corticosteroid dependent and colchicine resistant recurrent pericarditis



Eur J Prev Cardiol. 2019 Oct15: [Epub ahead of print]

9. What complications can be anticipated?

- Recurrences in 20 to 30% of cases (pre-colchicine time) but halved by colchicine
- Risk of cardiac tamponade very low during follow-up if specific causes excluded (e.g. systemic inflammatory diseases, bacterial and neoplastic etiologies)
- Risk of constriction related to the etiology and not the number of recurrences (never reported in idiopathic recurrent pericarditis)

10. What is the risk of constriction?

- 20-30% bacterial etiologies (TB, purulent)
- 2-5% neoplastic etiology, systemic inflammatory diseases, post-cardiac injury syndromes
- <1% viral or ”idiopathic” pericarditis

Working Group on Myocardial & Pericardial Diseases

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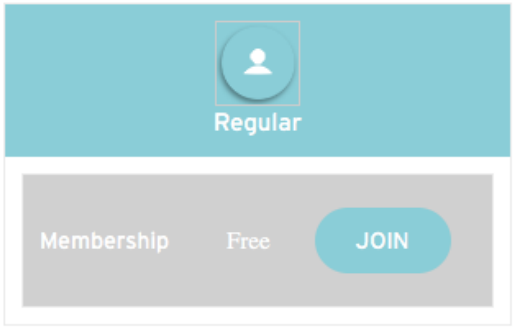

Find out more about the application process

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When applying online, you will be requested to login via your My ESC account.

Candidates should

- Be involved in clinical care, diagnosis and management and promote research of heart muscle and pericardial diseases
- Be ready to participate in and promote educational and research activities of the working group


See you in Torino for 2020 Annual Meeting of the ESC WG on Myocardial and Pericardial Diseases!