



FREE ACCESS | ARTICLE

HEART FAILURE AND CARDIOMYOPATHIES

SESSION TITLE: MANAGEMENT OF PERICARDITIS

Abstract 13432: Predictors of Adverse Outcomes in Patients With Acute Pericarditis

Alessandra Vecchie, Juan Guido Chiabrando, Megan Dell, George Wohlford, Sherrie Tafuri, John Paolini, Benjamin W Van Tassell, Anna Beutler, Tamas Gal, Fabrizio Montecucco, Antonio Abbate¹Pauley Heart Cntr, Virginia Commonwealth Univ Hosp, Richmond, VA²Interventional Cardiology Service, Hosp Italiano de Buenos Aires, Buenos Aires, Argentina³Dept of Pharmacotherapy, Virginia Commonwealth Univ, Richmond, VA⁴., Kiniksa Pharmaceuticals, Bermuda, Bermuda⁵Dept of Pharmacotherapy, Virginia Commonwealth Univ Hosp, Richmond, VA⁶Dept of Biostatistics, Virginia Commonwealth Univ Hosp, Richmond, VA⁷Internal Medicine, Univ of Genoa, Genoa, Italy

Originally published 11 Nov 2019 | Circulation. 2019;140:A13432

Abstract

Introduction: Acute pericarditis is the most common presentation of pericardial diseases. Although generally characterized by benign prognosis, recurrences, constriction, and tamponade can occur.

Hypothesis: Clinical characteristics of patients with pericarditis may help predict adverse outcomes.

Methods: We used an informatics-based search engine using International Statistical Classification of Diseases codes related to pericardial disease and then extracted patient-level data from the electronic health record, including only those meeting the European Society of Cardiology criteria for acute pericarditis. We defined failure of treatment, recurrences, cardiac tamponade, and constrictive pericarditis as adverse outcomes. Odds ratio (OR) and 95% confidence interval are reported.

Results: We identified 240 patients, (56% males) with a median age of 51 [34-62] years. Acute pericarditis was considered idiopathic in 126 cases (53%), related to cardiac injury in 79 cases (33%), or due to other causes in 35 cases (14%). The median follow-up time was 179 [20-450] days. Seventy-five patients (31%) experienced at least one adverse outcome. Subacute pericarditis (>14 days) was an independent predictor of adverse outcomes (OR 15.5 [1.8-137.0], $p=0.014$). In comparison to patients with cardiac injury, those with idiopathic pericarditis were younger (48 [34-58] vs 61 [50-71] years, $p<0.001$), and less likely to have abnormal troponin I levels (>0.09 ng/ml)(10 [8%] vs 25 [32%]; OR 0.06 [0.02-0.15], $p<0.001$) yet associated a higher risk of treatment failure (10% vs 2%, OR 4.45 [0.98-20.29], $p=0.037$) and of combined risk of failure and recurrence (26% vs 13%, OR 2.44 [1.13-5.30], $p=0.021$). Elevated troponin I levels, independent of the nature of pericarditis, identified a group of patients less likely to experience adverse events (12% vs 33%, OR 0.26 [0.10-0.67], $p=0.003$), and, in particular, recurrent pericarditis (4% vs 17%, OR 0.19 [0.04-0.85], $p=0.017$).

Conclusions: Acute pericarditis was associated with a significant number of adverse outcomes. Idiopathic pericarditis, subacute presentation, and lack of elevated troponin I levels are associated with higher incidence of adverse outcomes.

Footnotes

For author disclosure information, please visit the AHA Scientific Sessions 2019 [Online Program Planner](#) and search for the abstract title.



[^ Back to top](#)



Circulation

AHA Journals

Arteriosclerosis, Thrombosis, and Vascular Biology (ATVB)

Circulation

Circ: Arrhythmia and Electrophysiology

Circ: Genomic and Precision Medicine

Circ: Cardiovascular Imaging

Circ: Cardiovascular Interventions

Circ: Cardiovascular Quality & Outcomes

Circ: Heart Failure

Circulation Research

Hypertension

Stroke

Journal of the American Heart Association (JAHA)

Journal Information

About

Editorial Board

Reprints

Customer Service and Ordering Information

AHA Journals RSS Feeds

For International Users

[Institutions/Librarians FAQ](#)
[For Subscribers](#)
[Subscriber Help](#)
[Wolters Kluwer Privacy Policy](#)

Subjects

[All Subjects](#)
[Arrhythmia and Electrophysiology](#)
[Basic, Translational, and Clinical Research](#)
[Critical Care and Resuscitation](#)
[Epidemiology, Lifestyle, and Prevention](#)
[Genetics](#)
[Heart Failure and Cardiac Disease](#)
[Hypertension](#)
[Imaging and Diagnostic Testing](#)
[Intervention, Surgery, Transplantation](#)
[Quality and Outcomes](#)
[Stroke](#)
[Vascular Disease](#)

Features

[Bridging Disciplines](#)
[Circulation at Major Meetings](#)
[Special Themed Issues](#)
[Global Impact of the 2017 ACC/AHA Hypertension Guidelines](#)
[Circulation Supplements](#)
[Cardiovascular Case Series](#)
[ECG Challenge](#)
[Hospitals of History](#)
[On My Mind](#)
[Podcast Archive](#)
[- Circulation on the Run](#)
[- Subscribe to Circulation on the Run](#)
[- #FITFAVES](#)
[Circulation Doodle](#)

Resources & Education

[AHA Guidelines and Statements](#)
[Circulation CME](#)
[Information for Advertisers](#)

For Authors & Reviewers

[Instructions for Authors](#)

[Submission Site](#)

[Author Reprints](#)



American Heart Association®

National Center
7272 Greenville Ave.
Dallas, TX 75231

Customer Service
1-800-AHA-USA-1
1-800-242-8721

[Local Info](#)
[Contact Us](#)

ABOUT US

- [About the AHA/ASA](#) >
- [2016-17 Annual Report](#) >
- [AHA Financial Information](#) >
- [Careers](#) >
- SHOP** >
- [Latest Heart and Stroke News](#) >
- [AHA/ASA Media Newsroom](#) >
- [Global Programs](#) >

OUR SITES

- [American Heart Association](#) >

[American Stroke Association](#) >

[Professional Heart Daily](#) >

[More Sites](#) >

TAKE ACTION

[Advocate](#) >

[Donate](#) >

[Planned Giving](#) >

[Volunteer](#) >

ONLINE COMMUNITIES

[AFib Support](#) >

[Garden Community](#) >

[Patient Support Network](#) >

[Privacy Policy](#) | [Copyright](#) | [Ethics Policy](#) | [Conflict of Interest Policy](#) | [Linking Policy](#) | [Diversity](#) | [Careers](#) |

[Suppliers & Providers](#) | [Accessibility Statement](#)

© American Heart Association, Inc. All rights reserved. Unauthorized use prohibited. The American Heart Association is qualified 501(c)(3) tax-exempt organization.

*Red Dress TM DHHS, Go Red TM; AHA; National Wear Red Day [®] is registered trademark.

