

Dressler's Syndrome: Case Report

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ABSTRACT

Dressler's syndrome should be considered in the differential diagnosis of chest pain, especially in patients at late stages of the progression of the ischemic process. Myocardial rupture is a rare event often associated with sudden death after myocardial infarction. This case report describes the 56 years age old man who present in persistent chest pain with radiating in shoulder and breathlessness with high grade fever. He had previously myocardial infarction in one month back and treated with reperfusion therapy and also history of hypertension and type 2 diabetes mellitus under medications. He finally diagnosed in evidence of ECG and CT findings.

KEYWORDS: Dressler Syndrome, Myocardial Infarction, Myocardial Rupture and Ischemia

INTRODUCTION:

Dressler syndrome may also be called post-myocardial infarction syndrome, post-traumatic pericarditis, post-cardiac injury syndrome and post-pericardiotomy syndrome. Dressler syndrome is inflammation of the sac surrounding the heart (pericarditis). It's believed to occur as the result of the immune system responding to damage to heart tissue or damage to the sac around the heart (pericardium). The damage can result from a heart attack, surgery or traumatic injury. Symptoms include chest pain, which can feel like chest pain from a heart attack. Myocardial rupture is a rare event often associated with sudden death after myocardial infarction. Hospital mortality is approaching 60%. In this case report, we present a very rare case of a patient hospitalized with cardiogenic shock secondary to cardiac rupture as a late complication of myocardial infarction.

Case presentation:

A case of 56 years age old man presenting emergency department with complaints of chest pain with radiating in shoulder and breathlessness with high

grade fever. He had previous history of coronary artery diseases and treated with reperfusion therapy in one month back. He had previous history of hypertension and type 2 diabetes mellitus under medication with past 5 years. He has differentially diagnosed as pericarditis, cardiogenic shock and congestive heart failure.

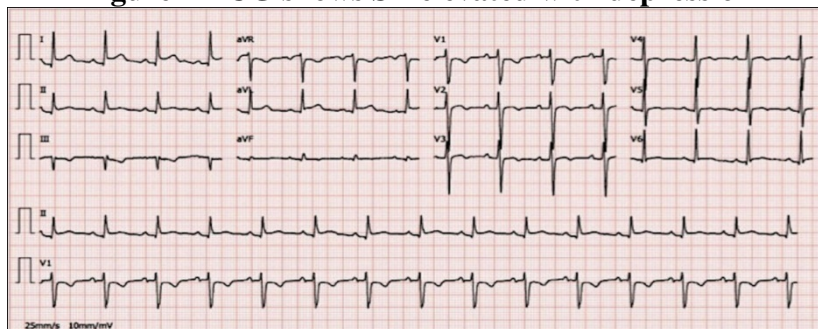
He underwent diagnostic studies of ECG, X ray, ECHO, computed tomography and laboratory investigations such as complete blood count, C-reactive protein, renal function test, electrolytes and cardiac enzymes like Trop I, CPK, CKMB. ECG findings shows that ST elevated with depression and tachycardia, electrocardiogram shows that pericardial effusion and severe LV dysfunction, ejection Fraction 40% and finally computed tomography findings revealed that the presence of a small left-sided pleural effusion and pericardial effusion, a thickening and hypercaptation of the pericardial leaflets. The laboratory investigations shows elevated total leucocytes counts, Trop I elevated and C-reactive protein was 136mg/L.

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Figure 1 ECG shows ST elevated with depression**Figure 2 CT findings revealed that pleural effusion and pericardial effusion**

The patient was hospitalized with inotropic support, anti-inflammatory therapy, anticoagulation therapy and antipyretic. During the hospitalization patient 3 days patient condition is improved and he discharged with anti-inflammatory and antiplatelet with colchicine and regular medication of hypertension and diabetes medication. He advised as follow up care of after 2 months.

Discussion:

Dressler's syndrome, additionally referred to as post cardiac harm syndrome, changed into first defined via way of means of William Dressler at Maimonides Medical Center in 1956, and its prevalence has been declining in latest years.² Dressler's syndrome is a secondary shape of pericarditis that could arise after acute myocardial infarction, cardiac surgery, disturbing harm or ordinary endovascular procedures. The etiology isn't always nicely understood, however it's far believed that an preliminary harm to mesothelium pericardial cells, blended with blood within side the pericardial space, triggers an immune response. This effects in immune complicated deposition within side the pericardium, pleura and lungs, which reasons an inflammatory response.

The disorder is characterized via way of means of a continual low-grade fever, thoracic pain, pericarditis and a pericardial effusion and/or pleural effusion. Dressler's syndrome is tough to diagnose due to the fact its signs are much like the ones of many different conditions, which includes pneumonia, pulmonary embolism, angina, congestive coronary heart failure or acute myocardial infarction.

Diagnostic of Dressler's syndrome must consist of entire blood rely in order to reveal leukocytosis and an growth in C reactive protein level; blood cultures to exclude an infectious process; ECG which can display worldwide ST phase elevation and T-wave

inversion, which includes with pericarditis; echocardiogram to search for the presence of fluid close to the coronary heart or thickening within side the pericardium; thoracic radiography to peer if there may be any inflammation/effusion within side the lungs and/or thoracic CT or cardiac MRI scan, which produces precise of the lungs, coronary heart and the pericardium. The clinical course is most often benign, responding to a conservative management with anti-inflammatory therapy, including non-steroidal anti-inflammatory drugs (aspirin, ibuprofen or naproxen) and colchicine. Dressler's syndrome can cause more severe complications, including cardiac tamponade and constrictive pericarditis. Such complications can require invasive treatments, including pericardiocentesis or pericardiectomy. Although not a common condition, Dressler's syndrome should be considered in all patients with persistent fever and pleuritic thoracic pain, especially if symptoms begin 2 weeks after cardiac injury.

Conclusion:

Our case highlights and suggests importance of the clinical assessment of patients admitted with chest pain. Although rare, Dressler Syndrome should be considered in the differential diagnosis of chest pain, especially in patients who are in a late stage of the evolution of the ischemic process.

Conflict of Interest

None

Funding

None

Consent for publication

Informed consent was obtained from the parents of the patients to publish this case in medical journal.

References:

- [1] Winter MM. Pericardial complications of myocardial infarction. <https://www.uptodate.com/contents/search>. Accessed May 26, 2022.
- [2] Hoit BD. Etiology of pericardial disease. <https://www.uptodate.com/contents/search>. Accessed May 26, 2022.
- [3] Bonow RO, et al., eds. Pericardial diseases. In: Braunwald's Heart Disease: A Textbook of Cardiovascular Medicine. 12th ed. Elsevier; 2022. <https://www.clinicalkey.com>. Accessed May 26, 2022.
- [4] Mankad R (expert opinion). Mayo Clinic. Jan. 6, 2020.
- [5] Leib AD, et al. (2017). Dressler syndrome.
- [6] Salih M, et al. (2015). Pacemaker induced post cardiac injury syndrome.
- [7] Adler Y, et al. (2015). 2015 ESC Guidelines for the diagnosis and management of pericardial diseases.
- [8] Uncommon presentation of postcardiac injury syndrome: acute pericarditis after percutaneous coronary intervention., Gungor B, Ucer E, Erdinler IC,, International journal of cardiology, 2008 Aug 1

