



ELSEVIER

Available online at www.sciencedirect.com

ScienceDirect

journal homepage: www.elsevier.com/locate/jicc

Case Report

Unsuccessful primary percutaneous coronary intervention leading to left ventricular pseudoaneurysm



Adnan Kaya ^{a,*}, Ozlem Yildirimturk ^a, Emrah Bozbeyoglu ^a, Recep Haci ^a,
Murat Aşık ^b

^a Department of Cardiology, Dr. Siyami Ersek Cardiovascular and Thoracic Surgery Center, Istanbul 34668, Turkey

^b Department of Radiology, Dr. Siyami Ersek Cardiovascular and Thoracic Surgery Center, Istanbul 34087, Turkey

ARTICLE INFO

Article history:

Received 1 January 2014

Accepted 9 September 2014

Available online 5 October 2014

Keywords:

Myocardial infarction

Unsuccessful primary intervention

LV pseudoaneurysm

Complication

ABSTRACT

Left ventricular (LV) pseudoaneurysm is usually a very rare complication of transmural myocardial infarction. It starts in a few weeks that following transmural infarction and it has various clinical presentations. Congestive heart failure, mitral regurgitation, ventricular tachyarrhythmia, systemic embolism and cardiac rupture are the most important manifestations. Here we discuss a 54-year-old woman who had a history of unsuccessful revascularization following subacute anterior myocardial infarction, admitted our institution with acute pulmonary edema. Echocardiography revealed a wide apical pseudoaneurysm with moderate mitral regurgitation. After medical stabilization of acute heart failure, open heart surgery advised to the patient.

Copyright © 2014, Indian College of Cardiology. All rights reserved.

1. Introduction

Rupture of the free wall of the left ventricle is a catastrophic complication of acute myocardial infarction. However, it may be contained by overlying adherent pericardium causing pseudoaneurysm in rare cases. The accepted explanation for the development of pseudoaneurysm after myocardial infarction is that cardiac rupture is limited by pre-existing adhesions between the epicardium and the pericardium.^{1,2} It has been reported to occur mostly at the inferior segments of the left ventricle, following occlusion of the right coronary or left anterior descending branches.³ LV pseudoaneurysm more

common seen in men than women. Frances C et al⁴ published a review 1998 about LV pseudoaneurysm in which 184 patients over 270 were men (68%), 86 patients over 270 were women (32%). The management of pseudoaneurysm depends on the time of diagnosis and the availability of surgery. Rupture of the pseudoaneurysm is the most fatal and the most frightened complication.

2. Case presentation

A 54-year-old woman with history of percutaneous coronary intervention one month ago is administered our institution

* Corresponding author. Tel.: +90 532 400 97 65 (mobile), +90 554 713 47 73 (mobile); fax: +90 0216 348 93 25.

E-mail addresses: adnankaya@gmail.com, kayandan@yahoo.com (A. Kaya).

<http://dx.doi.org/10.1016/j.jicc.2014.09.001>

1561-8811/Copyright © 2014, Indian College of Cardiology. All rights reserved.

with symptoms of severe heart failure and hypotension. The patient had a chest pain that was taking three days long and shortness of breath before admitted another cardiac institution one month ago. Electrocardiography revealed subacute anterior myocardial infarction a coronary angiography performed to clarify lesions. The left anterior descending (LAD) artery found to be totally occluded from the mid segment and the circumflex artery (CX) found to be subtotally occluded from the mid segment (Fig. 1) and no significant lesion in right coronary (RCA) artery. Following unsuccessful LAD intervention, a bare metal stent of size 2.75 × 28 mm was delivered to CX lesion (Figs. 2 and 3). The patient discharged after one week follow-up period with furosemide 40 mg twice a day and spironolactone 25 mg once a day. Despite additional diuretic therapy the shortness of breath didn't get better and the functional capacity diminished. An admission to our emergency department with acute pulmonary edema; one month later after stent implantation the patient interned to coronary intensive care unit.

The physical examination of the patient at admission of our institution showed a blood pressure of 81/56 mm Hg, a heart rate of 90 beats/min, systemic oxygen saturation at room air was 89%. Her cardiac examination revealed a LV 3rd heart sound and crepitations were found in lung examination upto 2/3 of lungs. Electrocardiography showed QS pattern from V1 to V6 in anterior leads and also QS pattern in inferior leads D2, D3 and AVF with sinus rhythm (Fig. 4). Echocardiography revealed anterior akinesis with ejection fraction 30%, moderate mitral regurgitation and a large apical pseudoaneurysm (Video 1) (Figs. 5, 6, 7 and 8). A computed tomography (CT) scan of the chest showed a large apical pseudoaneurysm of LV (Figs. 9 and 10). Following consultation with cardiovascular surgery, an operation planned for revascularization of LAD, repair of LV pseudoaneurysm and mitral regurgitation.

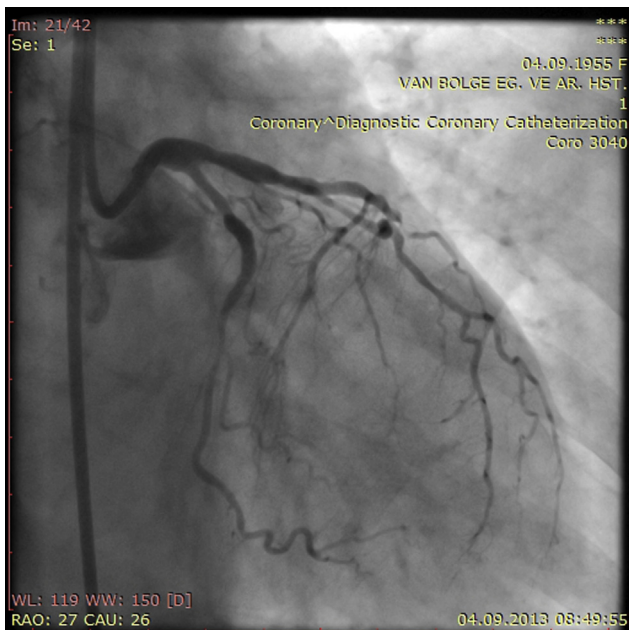


Fig. 1 – Coronary artery angiographic view of left anterior descending artery (LAD) and circumflex artery (CX) before intervention.

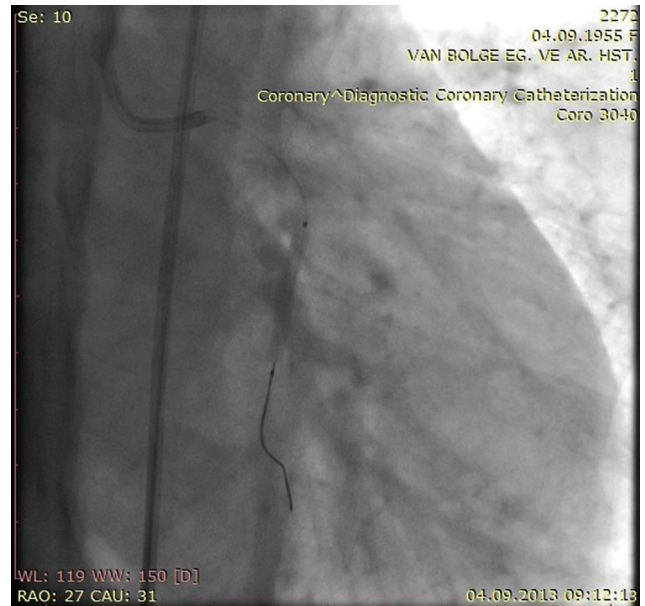


Fig. 2 – Coronary artery angiographic view of left anterior descending artery (LAD) and circumflex artery (CX) during intervention.

However patient did not accept the procedure and she was discharged after stabilization with medical treatment. During three months following period three more hospitalization required and her functional class (NYHA) altered between II to III.

Supplementary data related to this article can be found online at <http://dx.doi.org/10.1016/j.jicc.2014.09.001>.

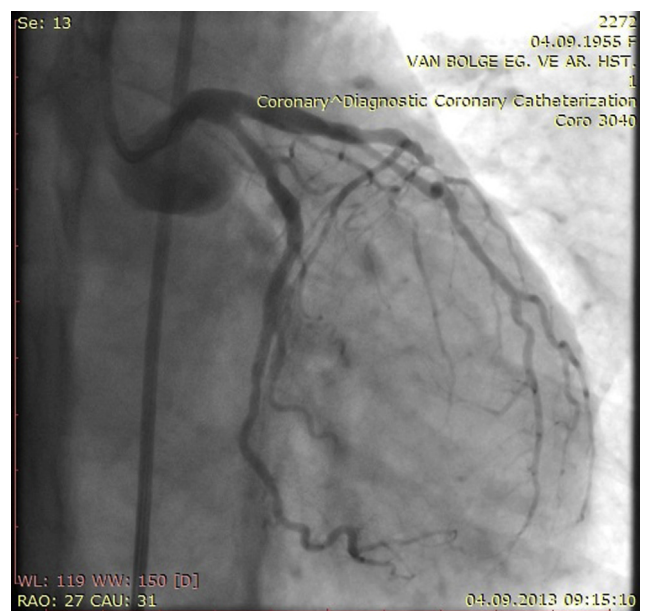


Fig. 3 – Coronary artery angiographic view of left anterior descending artery (LAD) and circumflex artery (CX) after intervention.

Download English Version:

<https://daneshyari.com/en/article/2973833>

Download Persian Version:

<https://daneshyari.com/article/2973833>

[Daneshyari.com](https://daneshyari.com)