



Short communication

A huge left ventricular pseudoaneurysm manifesting as acute dyspnea

Aksüyek Savaş Çelebi^a, Özlem Özcan Çelebi^{b,*}, Erdem Diker^b^a Department of Cardiology, TOBB ETU Hospital, Ankara, Turkey^b Department of Cardiology, Medicana International Hospital, Ankara, Turkey

ARTICLE INFO

Article history:

Received 30 April 2015

Received in revised form 3 July 2015

Accepted 5 July 2015

Available online 17 August 2015

Keywords:

Pseudoaneurysm

Transthoracic echocardiography

ABSTRACT

Pseudoaneurysm of the left ventricle (LV) is one of the mechanic complications of myocardial infarction. This rare complication mostly stems from inferior wall of the LV. The wall of pseudoaneurysm contains pericardium and/or scar tissue but not myocardium. Transthoracic echocardiography is commonly used in clinical practice and is usually sufficient to make a diagnosis of LV pseudoaneurysm. It is important to differentiate pseudoaneurysm from true LV aneurysm. Pseudoaneurysm does not contain myocardial tissue whereas true LV aneurysm does. Pseudoaneurysm also has narrow neck unlike true LV aneurysm. Urgent surgical approach is indicated because of fatal rupture. Here we report a case report of pseudoaneurysm manifesting with acute dyspnea.

© 2015 The Society of Cardiovascular Academy. Production and hosting by Elsevier B.V. All rights reserved. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

Case report

65-year-old man was admitted to our department with acute and acute dyspnea within 2 h (New York Heart Association functional class III). He had a past medical history of coronary artery disease and heart failure. His previous transthoracic echocardiography (TTE), which was performed 1 month ago, showed hypokinesia of both inferior and anterior segments with ejection fraction (EF) of %30. He was on aspirin, statin and beta-blocker therapy. Cardiovascular examination was notable for bilateral pulmonary rales and S3, which were consistent with heart failure. Electrocardiography revealed q waves in inferior and anterior leads. TTE showed severe depression of LV systolic function (EF = %15) and a giant extra chamber next to inferior wall of LV. This extra chamber was surrounded by parietal pericardium and was consistent with pseudoaneurysm (Fig. 1). Parenteral diuretic and nitroglycerine were started and he was urgently referred for surgery.

Pseudoaneurysm of the left ventricle (LV) is one of the mechanic complications of myocardial infarction and mostly stems from inferior wall¹. It is caused by contained rupture of LV free wall². The wall of pseudoaneurysm contains pericardium and/or scar tissue but not myocardium³. The diagnosis might be difficult to make since a pseudoaneurysm is easily confused with a true aneurysm. In contrast to true aneurysm, pseudoaneurysm has narrow neck. TTE is commonly used in clinical practice and is usually sufficient to make a diagnosis of

LV pseudoaneurysm like this currently presented case. There is an indication for urgent surgical resection of pseudoaneurysm due to the risk of fatal rupture^{3,4}.



Fig. 1. Transthoracic echocardiography shows inferior left ventricular pseudoaneurysm through a narrow neck (arrow) in apical 2-chamber view. LV = left ventricle, LA = left atrium.

* Corresponding author at: Medicana International Ankara Hastanesi, Kardiyoloji Kliniği, 06510 Ankara, Turkey. Tel.: +90 312 292 92 92; fax: +90 312 2203170.

E-mail address: drozlemoz79@yahoo.com (Ö.Ö. Çelebi).

Peer review under responsibility of The Society of Cardiovascular Academy.

References

1. Komeda M, David TE. Surgical treatment of postinfarction false aneurysm of the left ventricle. *J Thorac Cardiovasc Surg* 1993;**106**(6):1189–1191.
2. Mahilmaran A, Nayar PG, Sheshadri M, Sudarsana G, Abraham KA. Left ventricular pseudoaneurysm caused by coronary spasm, myocardial infarction, and myocardial rupture. *Tex Heart Inst J* 2002;**29**(2):122–125.
3. Vlodaver Z, Coe JI, Edwards JE. True and false left ventricular aneurysms. Propensity for the latter to rupture. *Circulation* 1975;**51**(3):567–572.
4. Yilic L, Yetkin U, Tulukoğlu E, Gürbüz A. Surgical approach of a giant left ventricular pseudoaneurysm. *T Klin Kalp Damar Cerrahisi* 2004;**5**(2):39–43.