

Aneurysm of the Left Ventricle Revealed by a Coronary Syndrome Complicated by Cardiogenic Shock

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Abstract

Left ventricular aneurysms have an incidence of 3.5 to 38%; their occurrence was first described in 1757 by John Hunter. The simultaneous presence of myocardial infarction and left ventricle aneurysm (LV) in the same patient is extremely rare and usually occurs during the first week after the MDI. Surgery remains the only valid treatment option.

Keywords: Left Ventricle; Myocardial Infarction; Coronary Syndrome; Cardiogenic Shock

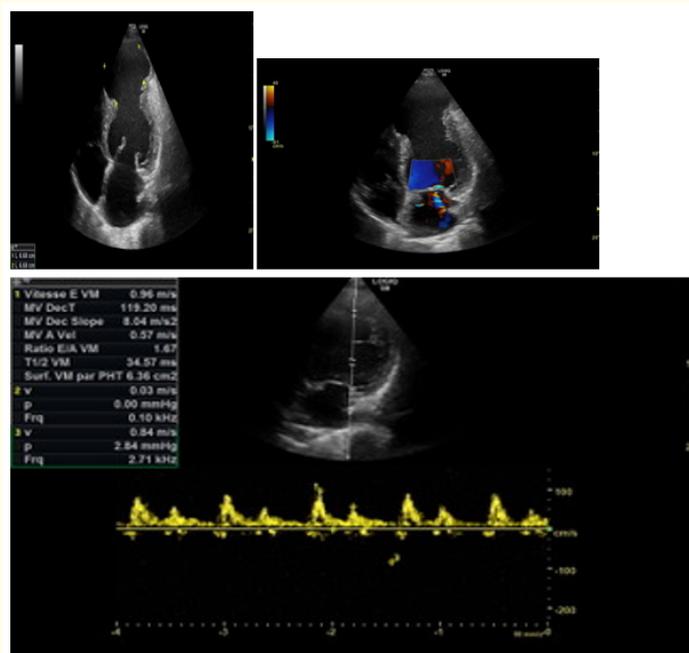
Introduction and Case Report

This is a 70-year-old patient, a chronic smoker, was admitted to the emergency room of the CHU Rabat in a cardiogenic shock table, mottling at the extremities, a spinning pulse with nYHA stage IV dyspnea, with left basithoracic pain associated with an ECG over shift of interest to the anterior territory and a regular sinus rhythm. The chest x-ray found cardiomegaly. Transthoracic echocardiography performed in the emergency department objectified apical akinesia of the VG with systolic dysfunction of the left ventricle (ejection fraction estimated at 45%) and a large apical aneurysm of the VG with high left ventricular filling pressures.

Faced with the patient's hemodynamic instability, he was admitted to an intensive care unit with a jugular central venous tract and an invasive blood pressure catheter.

After stabilization of the patient and withdrawal from vasoactive drugs, the patient was operated by the cardiovascular surgery team for aneurysm. The surgical follow-up was marked by the installation of a new episode of cardiogenic shock refractory to symptomatic and specific treatments.

The patient died on day 4 in post-operative.



Discussion

The complications of IDM are numerous and constitute the entire severity of coronary artery disease. The combination of an IDM and a left ventricular aneurysm, found in our patient, is a rare and highly lethal complication requiring urgent surgical management. The incidence of this complication has been estimated between 1% and 2% of IDMs, but it is responsible for a high mortality rate.

Transthoracic echocardiography remains the first-line examination with a high speed of diagnosis and sensitivity. Its management is surgical, which is not devoid of postoperative complications. Two attitudes are generally adopted: a delayed repair of 6 to 8 weeks after the IDM in order to carry out a repair on stronger scar tissue in case of hemodynamic stability and small VIC; or an emergency repair due to the hemodynamic instability of the patient [1-7].

Despite adequate management, the prognosis of this pathology is poor, with an estimated mortality of more than 20%. Prognostic factors are mainly represented by systemic blood pressure, right atrium pressure, and duration of extracorporeal circulation (ECC). The first interventions of a ventricular aneurysm were described in the 40s of the 20th century by Beck's team, which carried out an external strengthening of the aneurysmal wall by the fascia lata fascia. The first repair of an aneurysm by direct linear suture under CEC was described by Cooley, *et al.* in 1958 [8].

Bypass surgery associated with emergency surgery for VIC and LV aneurysm remains an attitude to be explored [9,10].

Conclusion

The combination of an LV aneurysm and myocardial infarction is a rare entity and usually occurs in the days following the IDM. Timely diagnosis and urgent surgical management significantly improve the patient's prognosis.

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