





International Journal of Cardiology 114 (2007) e122-e123



www.elsevier.com/locate/iicard

Letter to the Editor

Right coronary artery aneurysm

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Abstract

Coronary artery aneurysms, characterized by abnormal dilatations of a localized portion of the coronary artery, are an uncommon finding during angiography. We present a case where a giant right coronary aneurysm was detected during angiography, in a patient admitted with a inferior wall myocardial infarction.

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Keywords: Coronary aneurysm; Right coronary artery; Myocardial infarction; Coronary circulation

On April 2005, a 82-year-old male with past smoking history, dyslipidemia, diabetes, and chronic renal failure was admitted to our Hospital with the diagnosis of an inferior wall acute myocardial infarction. He was given thrombolytic therapy with reteplase, within 3 h of symptoms, with signs of reperfusion. The echocardiogram showed posterior and inferior wall hypokinesis with good left ventricular ejection fraction. Prior to discharge, he underwent a dobutamine stress SPECT image that revealed no important ischemia. The patient had an uncomplicated clinical outcome during hospitalization and, due to the old age and his condition of chronic renal failure on haemodialysis with a low everyday activity, no invasive investigation was carried on.

Five months later, this same patient was readmitted with chest pain and signs of an inferior wall myocardial infarction as before. A coronary angiogram was immediately performed to assess the possibility of mechanical reperfusion. The coronary angiography revealed a giant aneurysm of the midportion of the right coronary artery (Figs. 1 and 2), and a 90%, heavily calcified stenosis of the left anterior descending artery. CABG surgery was suggested, but it was refused by both the

Coronary artery aneurysms usually involve right coronary artery, followed by left anterior descending and the left circumflex coronary arteries [2]. This uncommon disorder



Fig. 1.

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patient and his family. Again with an uneventful recovery, he was sent home with medical therapy.

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Fig. 2.

has a prevalence on angiography ranging from 0.3% to 4.9% [1]. Usually related to atherosclerosis, the predicted 5-year mortality rate is nearly 30% [5], but treatment of this abnormalities is not well established as it is based mainly on case reports [2–4,6,7]. Some advocate conservative management, while others are in favour of a more aggressive approach (surgery or stenting). As far as we know, there are

not many cases reported in literature not managed with surgery or angioplasty. Here we present an 82-year old man with disabling chronic renal failure on dialysis, with a low physical activity. Although we suggested a more aggressive approach, conservative treatment with dual anti-platelet therapy, plus beta-blocker and statin was the patient's preferred option. One year after the last myocardial infarction, the patient is alive and doing well.

References

- [1] Swaye PS, Fisher LD, Litwin P, et al. Aneurysmal coronary artery disease. Circulation 1983;67:134–8.
- [2] Mushabar S, Lasch M. Coronary artery aneurysm: a review. Prog Cardiovasc Dis 1997;40:77–84.
- [3] Ercan E, Tengiz I, Yakut N, Gurbuz A. Large atherosclerotic left main coronary aneurysm: a case report and review of literature. Int J Cardiol 2003;88:95–8.
- [4] Aviram Galit, Loberman Dan, Herz Itzhak, Uretzky Gideon, Graif Moshe, Roth Arie. Thrombosis of a coronary artery aneurysm in a young man presenting with acute myocardial infarction. Circulation 2004:110(16):e448–9.
- [5] Baman TS, Cole JH, Devireddy CM, Sperling LS. Risk factors and outcomes in patients with coronary artery aneurysms. Am Heart J 2004;93:1549–51.
- [6] Gowda R, Dogan O, Tejani F, Khan I. Left main coronary aneurysm. Int J Cardiol 2005;105:115–6.
- [7] Szalat A, Durst R, Cohen A, Lotan C. Use of polytetrafluoroethylenecovered stent for treatment of coronary artery aneurysm. Catheter Cardiovasc Interv 2005;66:203–8.