SHORT CASES IN CARDIOLOGY

Right coronary artery pseudoaneurysm after blunt injury to the chest

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A 51 year old woman was transferred to our hospital for surgical treatment of a paracardiac mass. The patient was free of symptoms on admission. The chest x ray and electrocardiogram were normal. Echocardiography showed a large paracardiac mass with a homogeneous acoustic pattern in the right atrioventricular groove. Magnetic resonance imaging also showed a cardiac mass of about 6 cm in diameter located between the crux cordis and the posterior interventricular groove. Right coronary angiograms showed a discrete coronary artery aneurysm originating from the posterior descending branch (figure). The aneurysm was almost completely filled with a thrombus which was subsequently opacified in a right coronary angiogram. The distal segment of the posterior descending coronary artery was severely diseased and showed areas of dilatation. The other coronary arteries were normal.

Aneurysmectomy was successfully performed on June 1994 under extracorporeal circulation. Histopathological examination showed an old organised thrombus with recanalisation in a pseudoaneurysm of the coronary artery. Twelve years before she had been hit by a car. At the time she did not undergo treatment. This coronary pseudoaneurysm was probably caused by a non-penetrating chest injury sustained in the traffic accident. Coronary pseudoaneurysms resulting from non-penetrating chest injury are rare. To our knowledge, only two cases have been reported.^{1,2}

1 Stone D, Fleming HA. Aneurysm of left ventricle and left coronary artery after non-penetrating chest trauma. *Br Heart J* 1983;50:495-7.

2 Lascault G, Komajda M, Drobinski G, Grosgeat Y. Left coronary artery aneurysm and antero-septal acute myocardial infarction following blunt chest trauma. *Eur Heart J* 1986;7:538-40.

Right coronary angiogram: (A) blood flowing in the cavity; (B) the dilated distal posterior descending coronary artery; (C) thrombosed cavity which was subsequently opacified.