

Pseudoaneurysm of the ascending aorta ruptured into the right ventricle mimicking an acute myocardial infarction

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An 83-year-old man who had undergone aortic arch replacement 13 years previously was admitted to the National Cardiovascular Centre (Suita, Japan) with a suspected acute myocardial infarction. This diagnosis was based on the presence of chest pain in association with a raised white blood cell count and elevated levels of cardiac enzymes. Transthoracic echocardiography showed normal left ventricular contraction and a markedly enlarged ascending aorta. Colour Doppler examination showed the presence of shunt flow from the ascending aorta into the right ventricle (Figure 1). Computed tomographic scanning revealed a pseudoaneurysm of the ascending aorta with a maximum aortic diameter of 7.2 cm and a fistula into the right ventricle (Figure 2). Multidetector computed tomography coronary angiography showed normal coronary arteries. The patient subsequently underwent a successful ascending aorta replacement.

Fistula formation between the aorta and the cardiac chamber has been described as a potential complication of ascending aortic diseases, such as aortic dissection (1) and sinus of Valsalva aneurysm (2). To the best of our knowledge, however, there have been no reports

describing this condition as a complication of aortic aneurysms. Although the patient had a history of aortic arch repair 13 years previously, findings during surgery suggested no apparent relationship between this history and the subsequent development of the ascending aortic aneurysm.

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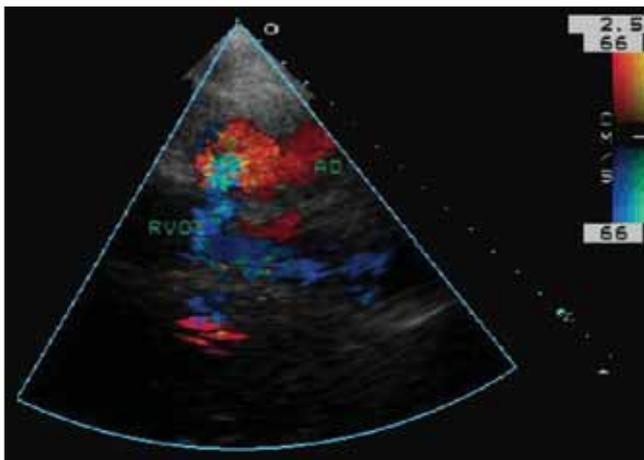


Figure 1 Colour Doppler imaging showing shunt flow from the ascending aorta (AO) into the right ventricular outflow tract (RVOT)



Figure 2 Computed tomography showing a pseudoaneurysm (P) of the ascending aorta (Ao) and a fistula (arrow) into the right ventricle (RV)

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