Badar Hasan et al., Intern Med 2017, 7:4 (Suppl)
DOI: 10.4172/2165-8048-C1-006

A case of asymptomatic left ventricular outflow tract pseudoaneurysm

Badar Hasan, Talal Asif and **Rebecca Pauly**
University of Missouri Kansas City School of Medicine, USA

Introduction: Left ventricular outflow tract (LVOT) pseudoaneurysm is an uncommon disorder with a high morbidity and mortality. It has been described in only a few case reports after infective endocarditis, post aortic valve replacement, thoracic injury and aortic root surgery. This pseudoaneurysm carry the potential of life threatening complications in the form of rupture into the pericardial cavity, compression of adjacent coronary arteries producing angina, thromboembolism, stroke, heart failure and sudden cardiac death. Here we present a case of LVOT pseudoaneurysm discovered on routine follow up imaging in an asymptomatic patient with history of aortic valve replacement for endocarditis. This case also raises awareness of the diagnostic and therapeutic challenges that this condition presents.

Case Report: A 27 year old male with a past medical history of bicuspid aortic valve infective endocarditis status post bioprosthetic aortic valve replacement 4 years prior, presented to us for routine follow up. He had lost his insurance following the surgery and had recently acquired it again. Patients reported, being active and in perfect health. Physical examination was unremarkable except for a grade 2/6 ejection systolic murmur at the left upper sternal border. There was no clinical evidence of heart failure or recurrence of endocarditis. A transthoracic echocardiogram was ordered which demonstrated a left ventricular ejection fraction (LVEF) of 60-65%, possible bioprosthetic aortic valve dehiscence due to 4.8 cm aortic root aneurysm and paravalvular regurgitation. Patient was then hospitalized for additional workup. Transesophageal echocardiogram was done next which illustrated a 4.1 X 3.1 cm pseudoaneurysm below the bioprosthetic aortic valve in the LVOT. LVEF was estimated at 60%. There was also mild stenosis and central regurgitation of the bioprosthetic aortic valve. There was no evidence of valve dehiscence or paravalvular regurgitation. To further define the anatomy, a cardiac CT was obtained which confirmed a LVOT pseudoaneurysm measuring 35 mm X 26 mm in end-systole and end-diastole. Its starting point was clearly below the annulus of the aortic valve, directly underneath but separate from the origin of the right coronary artery. The ascending aorta was of normal size. Coronary anatomy was also normal with no evidence of atherosclerosis. Given the absence of symptoms, patient was discharged with instructions of close follow up.

Discussion: The natural course of LVOT pseudoaneurysm is not clear. Surgical repair is also complex with risk of serious complications. Surgical correction in asymptomatic patients without rapid growth is controversial. Given the fact that there is no data on rate of growth of this pseudoaneurysm, case reports like these carry immense significance in defining its natural history and formulating treatment recommendations.

Biography

Badar Hassan is currently a second year Internal Medicine Resident at University of Missouri Kansas City School of Medicine.

hasanb@umkc.edu

Notes: