SA HEART
Vol. 5, No. 2, 2008

Image in cardiology

Jean Vorster and Pravin Manga

Division of Cardiology, Department of Medicine, Johannesburg Hospital and University of Witwatersrand

Address for correspondence:
J. Vorster
Department of Cardiology
PO Box 1481
Houghton
2041

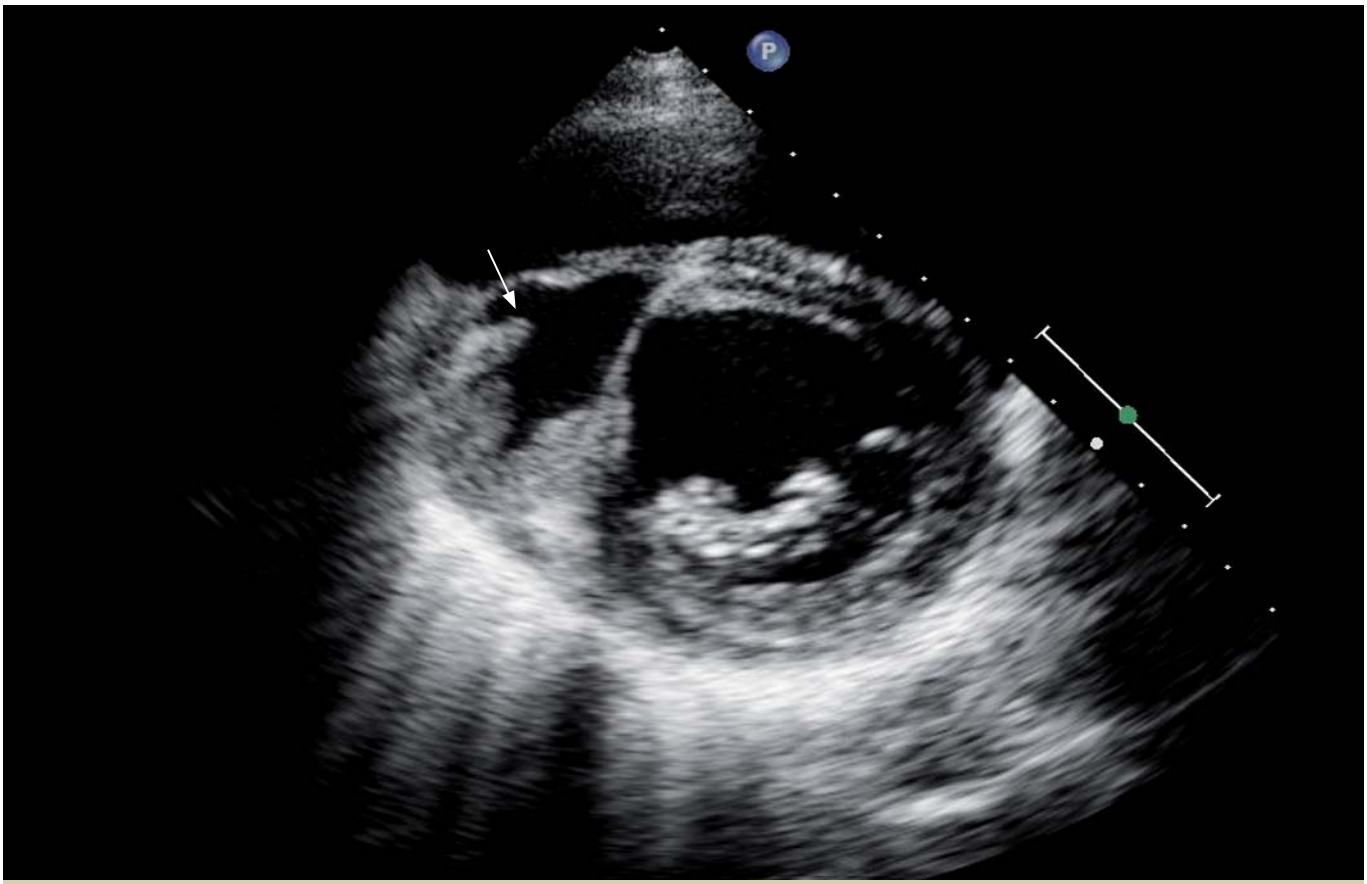
Email:
jtvorster@mweb.co.za

Sinus of Valsalva aneurysm is a relatively rare congenital lesion. The aneurysm is most commonly found in the right coronary sinus. When unruptured it usually remains silent. It may enlarge and may cause right ventricular outflow tract obstruction, heart block or even coronary artery obstruction.

The aneurysm sac ruptures spontaneously or rupture may be precipitated by trauma or exertion. In the majority of cases it ruptures into the right ventricle (60-90%) followed by right atrium (10%), or the left atrium (2-3%). On very rare occasions, as in our patient, the aneurysm dissects into the interventricular septum.

The diagnosis can be confirmed by transthoracic echocardiography in the majority of cases. Transesophageal echocardiography is usually necessary prior to surgical repair.

The echocardiographic image is of a 32-year-old female who presented to us with recent onset of exertional dyspnoea and chest pain. Her physical examination revealed a mildly displaced apex beat and a prominent aortic regurgitant murmur. Echocardiography demonstrated a sinus of Valsalva aneurysm of the right coronary cusp. The aneurysm was also noted to have dissected into the interventricular septum. Doppler examination confirmed severe aortic regurgitation. The patient declined surgery.



Parasternal short axis view at level of mitral leaflets. The sinus of Valsalva aneurysm has dissected (arrow) into the interventricular septum.