

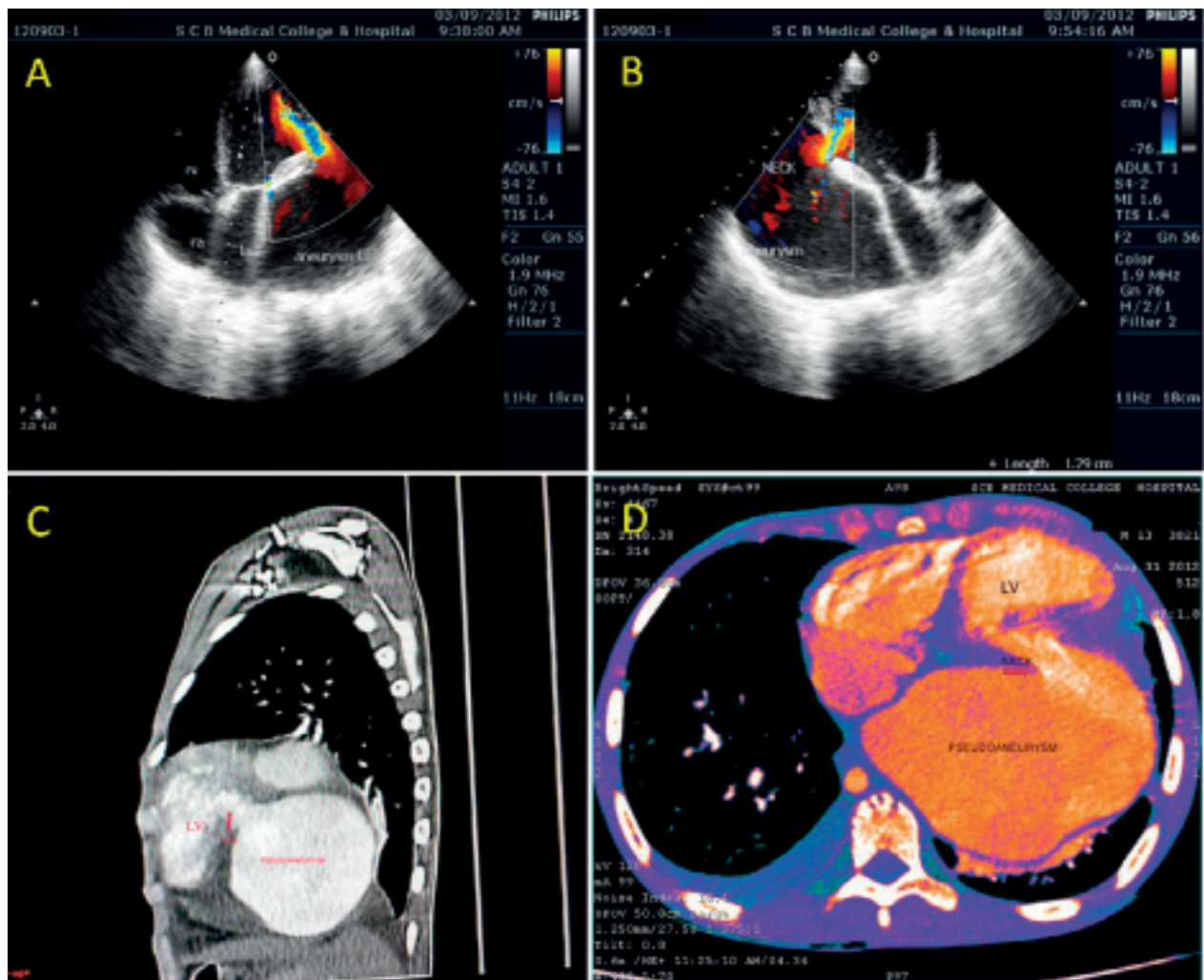
## IMAGES IN CARDIOLOGY

# Giant Left Ventricular Pseudoaneurysm in an Adolescent Boy

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A 16 years old boy presented with history of shortness of breath on exertion for last 6 months. There was no history of any fever, cough or chest pain.

On examination, he was found to have pulsatile precordium with accentuated heart sounds and presence of pansystolic murmur (grade 4/6) at apex. ECG was



**Figure 1.** Echocardiographic images in apical four chambers (A) and parasternal long-axis views (B) showing large pseudoaneurysm communicating with the left ventricle. The same was visualized on computed tomography scan of the chest also (C, D).

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normal. Chest X-ray revealed moderate cardiomegaly. Echocardiography revealed a huge mass present lateral and posterior to LV and LA, which was communicating with LV. CT thorax was showing the mass. CAG revealed normal coronaries. IV angiography confirmed the mass

to be a pseudoaneurysm. No obvious cause could be found out. There was no history of AMI, trauma or infective endocarditis.

We planned to send the patient to cardiothoracic surgery for further treatment. Unfortunately the patient succumbed on fifth day of admission.

Our purpose of selecting this case is as follows:

1. Approximately 95% of the LV pseudoaneurysm cases present in the old age, the etiology being ischemic heart disease mainly. This case presented in adolescent age and without any previous history of any predisposing factors
2. Between 3.5% and 20% of patients of myocardial infarction develop true aneurysms of the left ventricle (1). The incidence varies, depending on whether anatomic or angiographic criteria are used in the diagnosis. The ability to detect such aneurysms was poor until recently, so it is likely that

many were not detected. The increased number of cases uncovered recently by noninvasive diagnostic measures supports this assumption. Transmural infarction was the most common cause of these aneurysms, followed closely by cardiac surgery and trauma. Infection and inflammation were the next most frequent causes. Finally, there was a rare group of aneurysms, most of which were related to preexisting structural defects (2,3).

### **References**

1. Faxon DP, Ryan TJ, Davis KB, McCabe CH, Myers W, Lesperance J, Shaw R, Tong TGL. Prognostic significance of angiographically documented left ventricular aneurysm from the coronary artery surgery study (CASS). *Am J Cardiol.* 1982; 50:157–64.
2. Abrahams DG, Barton CJ, Cockshott WP, Edington GM, Weaver EJM. Annular subvalvular left ventricular aneurysms. *Q J Med.* 1962; 31:345–60.
3. Chesler E, Joffe N, Schamroth L, Meyers A. Annular subvalvular left ventricular aneurysms in the South African bantu. *Circulation.* 1965; 32:43–51.