

Recurrent collapses following permanent pacemaker implantation

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A 23-year-old lady presented with collapses associated with transient loss of consciousness. She had undergone permanent pacemaker implantation five months earlier for intermittent complete heart block.

An echocardiogram showed that the ventricular lead crossed the interatrial septum into left ventricle (LV) (Fig. 1a). Pacing check with a magnet revealed a right bundle branch block (RBBB) pattern indicating that left

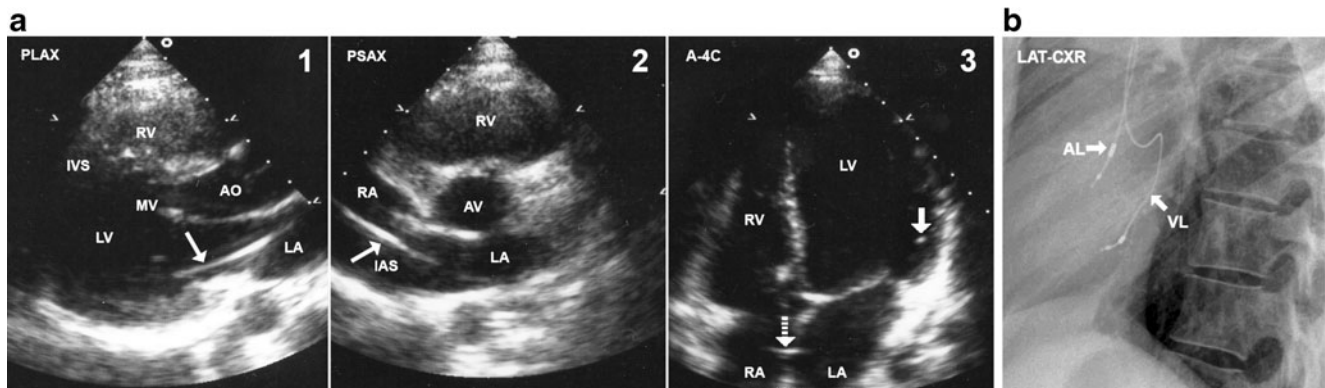


Fig. 1 a Transthoracic echocardiogram. 1. PLAX-parasternal long axis, solid arrow-ventricular lead, LA- left atrium, LV- left ventricle, IVS- interventricular septum, RV-right ventricle, MV-mitral valve, AO- aorta. 2. PSAX-parasternal short axis, solid arrow- ventricular lead, IAS-interatrial septum. 3. A-4 C-apical 4

chamber, broken arrow-ventricular lead crossing interatrial septum and solid arrow- tip of the ventricular lead in left ventricle. **b** Lateral chest X-Ray showing displaced atrial lead and posterior location of ventricular lead indicating malposition into left ventricle

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ventricle was being paced. Lateral chest X-ray (CXR) showed lead malposition (Fig. 1b).

Following the first procedure she only had a postero-anterior CXR showing satisfactory lead position, which alone is inadequate to accurately confirm lead positions. ECG, which could have alerted to the possibility of pacing the LV, was not performed.

Lead malposition is a rare complication of pacemaker implantation. Diagnosis of left ventricular lead malposi-

tion requires a high index of suspicion. A 12-lead ECG and a lateral CXR following pacemaker implantation can be diagnostic [1]. A 12-lead ECG in pace mode and in case of RBBB pattern echocardiogram for precise lead position has been recommended [2].

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