A 52-year-old woman presented with dyspnoea and pleuritic chest pain. Sixteen years prior, a single-chamber pacemaker was implanted for second-degree atrio-ventricular block. On computed tomography angiography of the chest, the pacemaker lead was noted to cross the interatrial septum immediately above the mitral valve before terminating within the left ventricle (Figure A). Confirmed on transoesophageal echocardiogram, the pacemaker lead was seen crossing a 15 mm ostium primum atrial septal defect (Figure B). A 12-lead electrocardiogram revealed a paced rhythm with right bundle branch block morphology consistent with early left ventricular activation (Figure C). On history, there were no episodes concerning for systemic thromboembolism, despite prolonged aberrant lead placement.

Conflict of interest: none declared.