

IMAGE IN
CARDIOLOGY

An unusual complication after mitral valve repair

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A 22-year-old lady presented to the outpatient department with new onset dyspnoea and effort intolerance. She had a prior history of successful mitral valve repair 5 years previously for symptomatic severe mitral regurgitation, secondary to myxomatous mitral valve prolapse. Clinical examination revealed an undisplaced apex with a parasternal heave (suggestive of right ventricular hypertrophy) and a soft ejection systolic murmur in the pulmonary area. On review of her previous echocardiograms, the pre-surgery apical 4 chamber (Figure 1A) revealed a dilated left ventricle and atrium with normal right heart chambers. Her post-operative echocardiogram (Figure 1B) confirmed successful mitral valve repair with a reduction in left ventricular size and normal right ventricle. A review of her echocardiogram (Figure 1C) at this visit, revealed new right ventricle dilatation with features of diastolic overload. No evidence of tricuspid/pulmonary incompetence was found. Transoesophageal echocardiography (Figure 1D) confirmed a large atrial septal defect (ASD). We concluded that this was an iatrogenic ASD as a complication of mitral valve repair. The ASD was closed percutaneously with an amplatzer device (see online publication for video supplement).

Iatrogenic ASD after mitral valve surgery is a rare complication, with only a few cases described in the literature.^(1,2) Comments

from the local surgeons were that if mitral valve repair was done via a transeptal incision, such a complication may occur if sutures break down. Successful percutaneous closure of such defects has been reported.^(3,4)

Conflict of interest: none declared.

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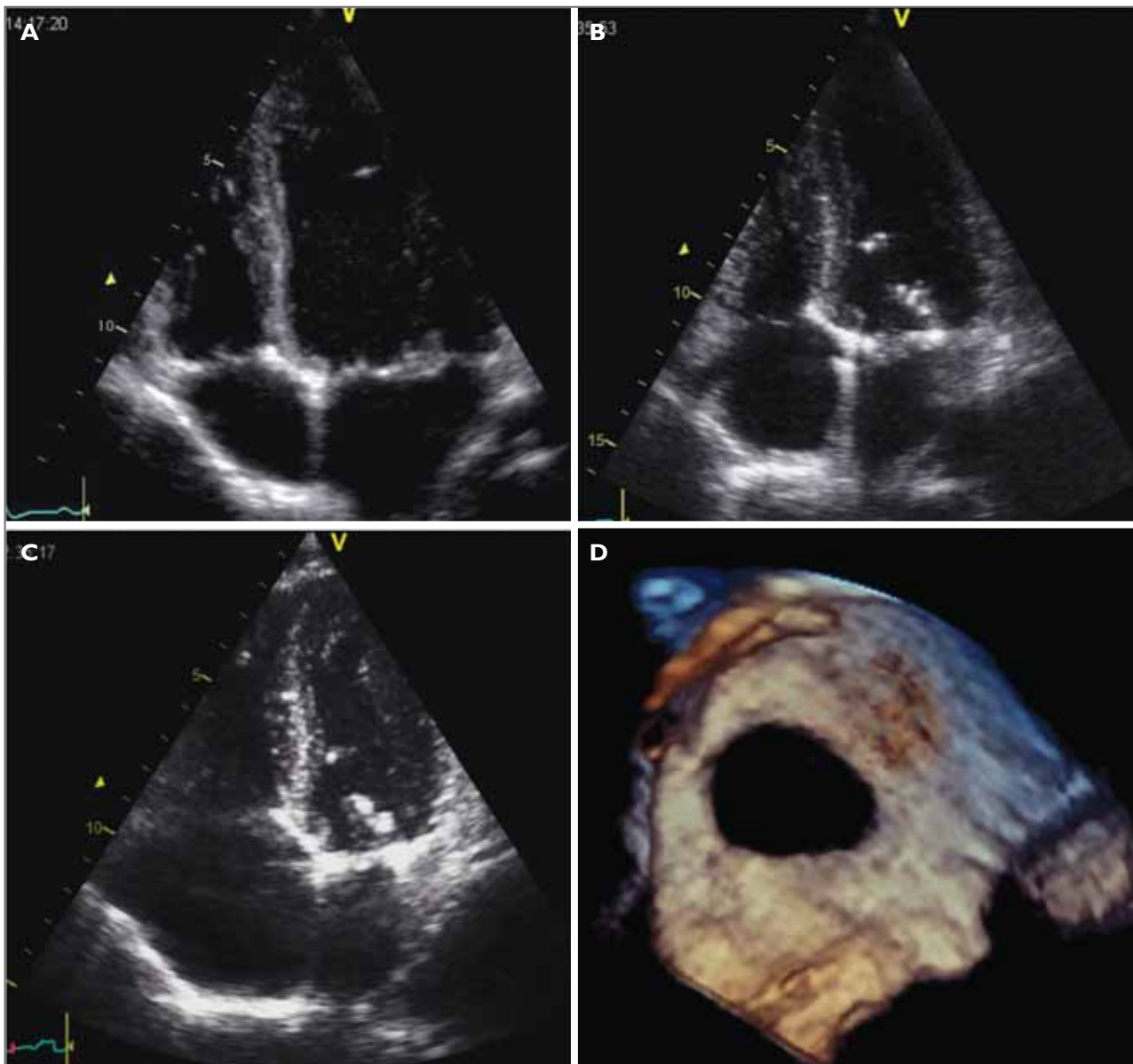


FIGURE 1A: Pre-operative apical 4 chamber showing a dilated left ventricle and left atrium due to severe MR.
1B: One day post mitral valve repair; apical 4 chamber view showing marked reduction in LV size.
1C: At presentation with iatrogenic ASD; apical 4 chamber view showing severe dilatation of both right atrium/ventricle and non dilated left ventricle.
1D: 3D transoesophageal view of intraatrial septum from the left atrial aspect, showing the ASD.

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