A giant left atrial thrombus

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DESCRIPTION
A 57-year-old woman with hypertension, dyslipidaemia, diabetes mellitus type 2, paroxysmal atrial fibrillation (AF), porcine mitral valve replacement and dilated cardiomyopathy requiring an automatic implantable cardioverter defibrillator presented with palpitation for 2 days. She had tiny left atrial thrombus (LAT), which resolved completely with warfarin 6 months ago. She was not in compliance with warfarin thereafter. Physical examination had no evidence for systemic embolisations and cardiovascular examination was unremarkable. ECG showed AF with rapid ventricular response of 132 beats per minutes. Chest X-ray showed remarkable cardiomegaly without congestion. Transthoracic echocardiogram (TTE) 6 months prior revealed a small LAT, normal bioprosthetic mitral valve and mild biventricular dilation with a severely reduced left ventricular ejection fraction of 25%-30%. Repeated TTE exposed a giant LAT measuring 4 cm × 3.5 cm (figure 1A–D, arrows). Surgical removal was recommended due to high risk of embolisation but patient deferred. Enoxaprin overlapping with warfarin was initiated and a rapid reduction in the size of the LAT was observed in 2 weeks.

Intracardiac thrombi are clinical dilemma because of systemic complications and lack of evidence-based guidelines in selecting optimal therapies. Clinical decisions and recommendations for primary and secondary prevention of embolic manifestations depend on echocardiography findings. TTE is generally recommended for detecting ventricular thrombus, whereas TEE is ideal for the atrial thrombus. Although various options for the management of intracardiac thrombi including anticoagulation, thrombolytic and interventions either endovascular or open surgery exist, anticoagulation is still effective as first-line therapy. There is little evidence of either in favour or against aggressive management when there is failure of medical management. More clinical studies are needed for development of proper guidelines. Therefore, anticoagulation alone is effective for a giant LAT and selection of treatment needs to be individualised.

Figure 1 Two-dimensional transthoracic echocardiography showing a giant thrombus (white arrows) in (A) parasternal long axis, (B) focus parasternal long axis, (C) apical four chambers and (D) focus apical four-chambers view.

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Learning points

► Giant atrial thrombus (AT) can easily be detected by transthoracic echocardiography.
► Regardless of the size, anticoagulation alone is effective for a giant left AT.
► Selection of a management option should be individualised.

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