Spectrum of rheumatic heart disease in single patient

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DESCRIPTION

Rheumatic heart disease (RHD) is still highly prevalent in developing countries and accounts for sizeable cardiovascular morbidity. The mitral valve is the most commonly involved valve. Since its introduction by Inoue *et al*¹ in 1984 as an alternative to surgical mitral commissurotomy for treatment of rheumatic mitral stenosis (MS), percutaneous

transvenous mitral commissurotomy (PTMC) has been successfully and safely performed in large series of patients at numerous centres. Excellent long-term results obtained after PTMC, like those of an open mitral valvotomy, are far superior to those after a closed mitral valvotomy (CMV).²

We presented a case of a patient with mitral restenosis after CMV and PTMC with a left atrium

Figure 1 (A) Giant left atrium with a large clot and a ligated appendage. (B) Large clot in a different plane.

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Figure 2 (A) Severe mitral stenosis with submitral fusion. (B) Small atrial septal defect secondary to previous septal puncture during percutaneous transvenous mitral commissurotomy.

(LA) clot who was successfully managed with surgery. A 45-year-old female patient, who is a known case of RHD since childhood, had undergone a CMV with ligation of the left-atrial appendage 18 years prior, a PTMC 5 years prior, now presented with a history of progressive dyspnoea for 6 months. Clinical evaluation found an irregular pulse of 80 bpm, a blood-pressure of 110/70 mm Hg, mid-diastolic murmur at apex and a loud P2.

An ECG showed atrial fibrillation (AF); a chest X-ray showed large LA without an appendage and transthoracic echocardiogram (TTE) showed a small roof clot. Hence the patient was subjected to a transoesophageal echocardiogram (TEE) before considering for a redo PTMC.

The TEE images (figures 1 and 2 and videos 1 and 2) showed the multiple aspects of rheumatic MS like large LA, large LA clot, absent LA appendage suggestive of past CMV, small atrial septal defect suggestive of prior PTMC, severe MS and submitral disease. This case illustrates the whole spectrum of rheumatic MS captured in these TEE images and also the fact that a

Video 1 TEE at 90 degrees two chamber view showing a Giant LA with a large clot of varying densities and an absent LAA.

Learning points

- ▶ Rheumatic mitral stenosis, highly prevalent in developing countries, can present with restenosis inspite of all available modalities of treatment.
- ▶ A clot can form in the left atrium (LA), even in the absence of an LA appendage especially in patients with valvular atrial fibrillation.
- ▶ Percutaneous transvenous mitral commissurotomy can be performed even in presence of clots in selected patients.

Patient consent Obtained.

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- 1 Inoue K, Owaki T, Nakamura T, *et al.* Clinical application of transvenous mitral commissurotomy by a new balloon catheter. *J Thorac Cardiovasc Surg* 1984;87:394–402.
- 2 Ben Farhat M, Ayari M, Maatouk F, *et al.* Percutaneous balloon versus surgical closed and open mitral commissurotomy seven-year follow-up results of a randomized trial. *Circulation* 1998;97:245–50.
- 3 Manjunath CN, Srinivasa KH, Ravindranath KS, *et al.* Balloon mitral valvotomy in patients with mitral stenosis and left atrial thrombus. *Catheter Cardiovasc Interv* 2009;74:653–61.

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