An Explosive Mixture

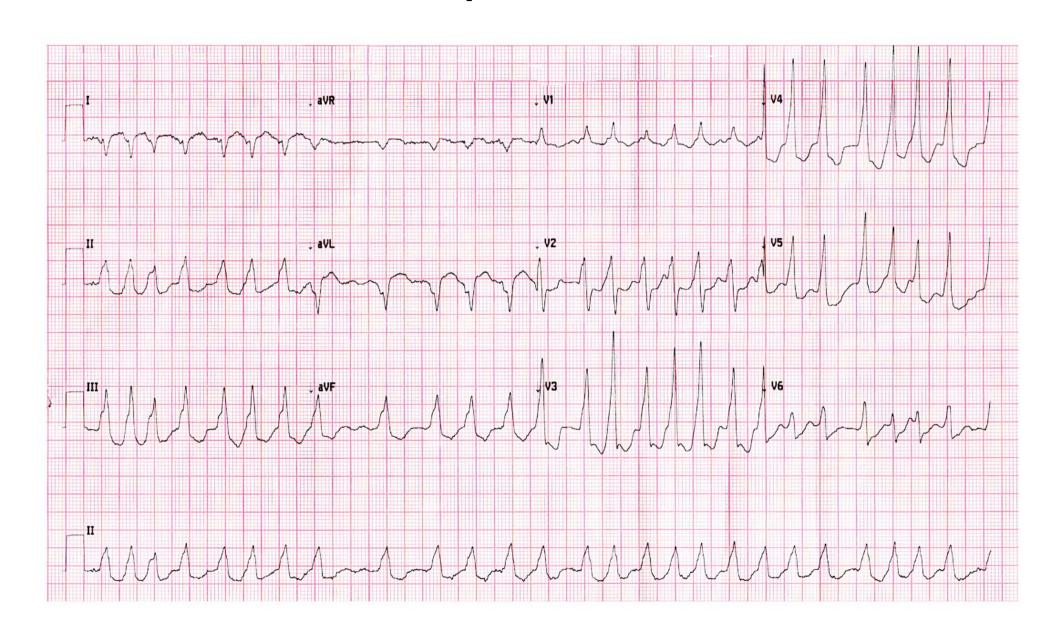
Mitral stenosis, Preexcited atrial fibrillation, Left atrial appendage thrombus and Left atrial appendage pathway

Raja Selvaraj JIPMER, Puducherry

Presentation

- 38 year old female
- Rheumatic mitral stenosis on medical management
- Never previously diagnosed to have AF or preexcitation
- Palpitations and presyncope

ECG at presentation



Echocardiography

- Severe mitral stenosis
- Moderate mitral regurgitation
- Normal LV function
- Mobile clot in LAA

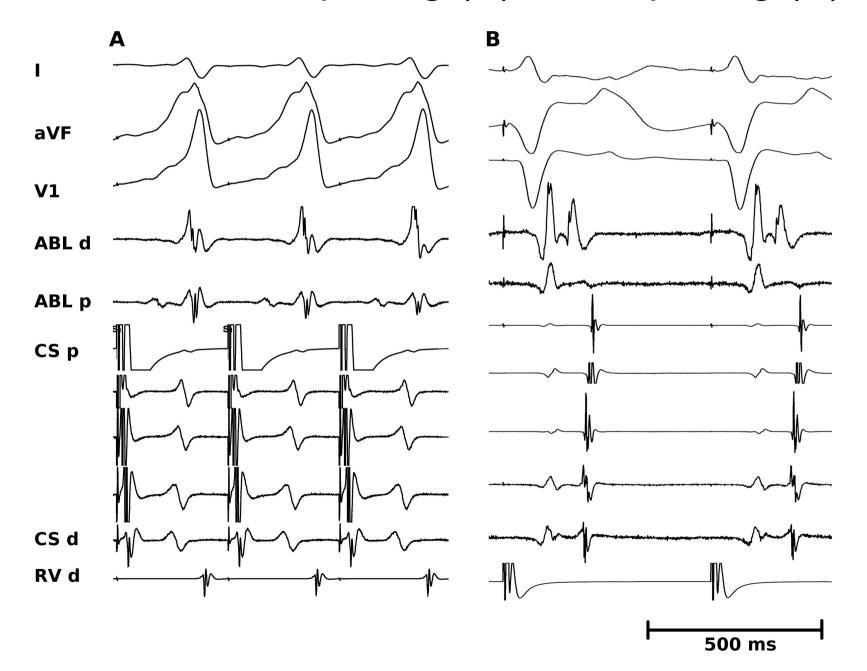
Attempted conservative management

- Anticoagulation Heparin and Warfarin
- Borderline hemodynamics / heart failure
- Flecainide with Metoprolol after 2 days (attempt to slow pathway conduction)
- Recurrent VF and polymorphic VT
- Sinus rhythm after cardioversion, but prolonged QT and non-sustained atrial arrhythmias
- ? Proarrhythmia

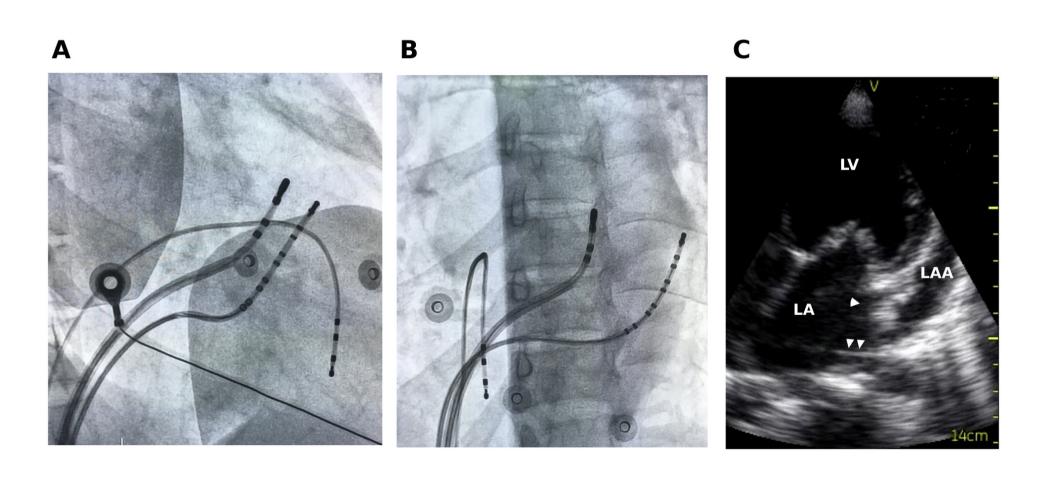
EP study

- Diagnostic catheters CS catheter placed deep, distal bipole at 3'O clock
- Bidirectional pathway conduction demonstrated
- Antegrade APERP 600/260
- Transseptal puncture for mapping in LA

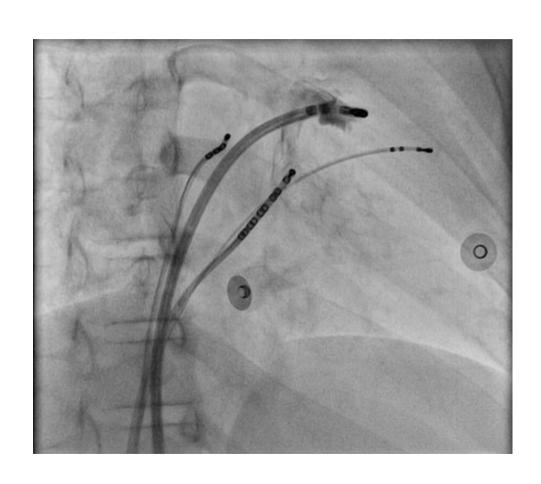
CS activation – A pacing (A) and V pacing (B)



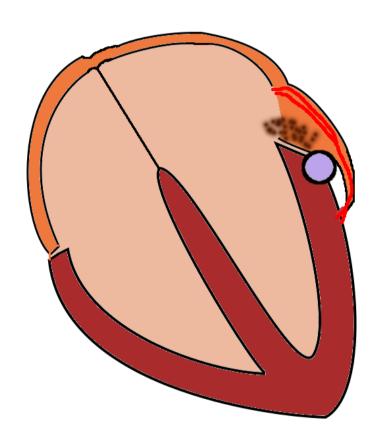
Earliest atrial activation – Echo confirmed LAA base



Compare with previous patient with LAA pathway



Schematic representation



Outcome

- Successful ablation
- No recurrence of arrhythmias
- Extubated, recovered and discharged
- Plan elective percutaneous / surgical treatment for MS

- Initial surgical approach would have been better
- High surgical risk
- Too high risk to map in LA with clot
- Balloon valvotomy with clot
- LV ablation with endocardial clot

- Better imaging intra procedure
- ICE / TEE would have been preferable