Focal atrial tachycardia originating from the coronary sinus ostium : Shall we think about the mitral annulus ?

Naccache.S; Halimi.F; Leclercq.JF CMC Parly II

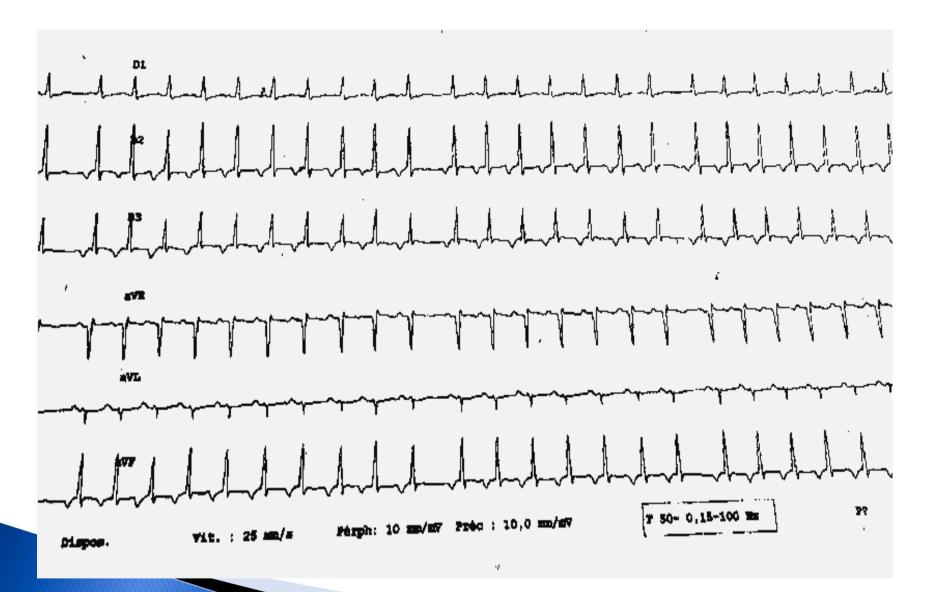
Introduction

Focal atrial tachycardia :

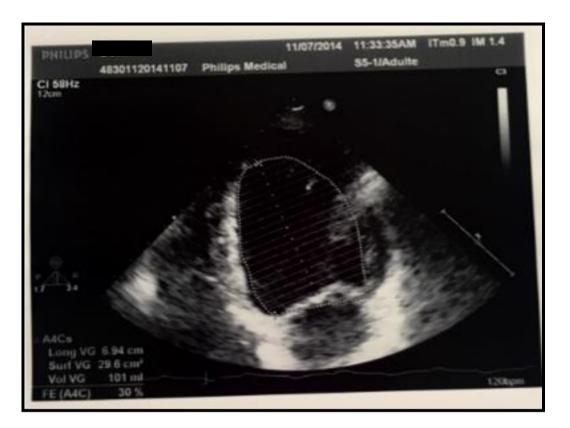
Uncommon cause of supraventricular tachycardia

- Difficult to treat medically
- Catheter ablation +++
- Anatomic localization not always obvious

- A 33-year old male
- Long medical history of incessant atrial tachycardia
- Catheter ablation : refused by the patient
- Symptoms : Dyspnea



 Transthoracic echocardiography : Dilated cardiomyopathy with depressed LVEF (30%)

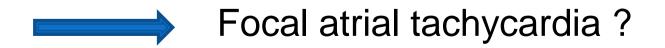


Cardiac MRI eliminated an underlying cardiomyopathy

Tachycardia-induced cardiomyopathy



- supraventricular tachycardia
- Negative p waves in inferior leads



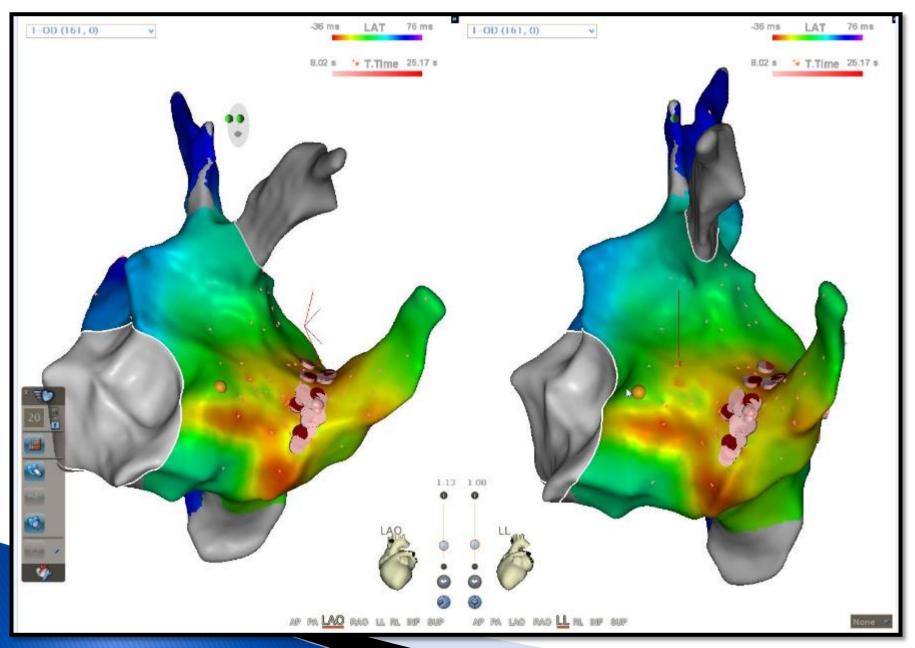


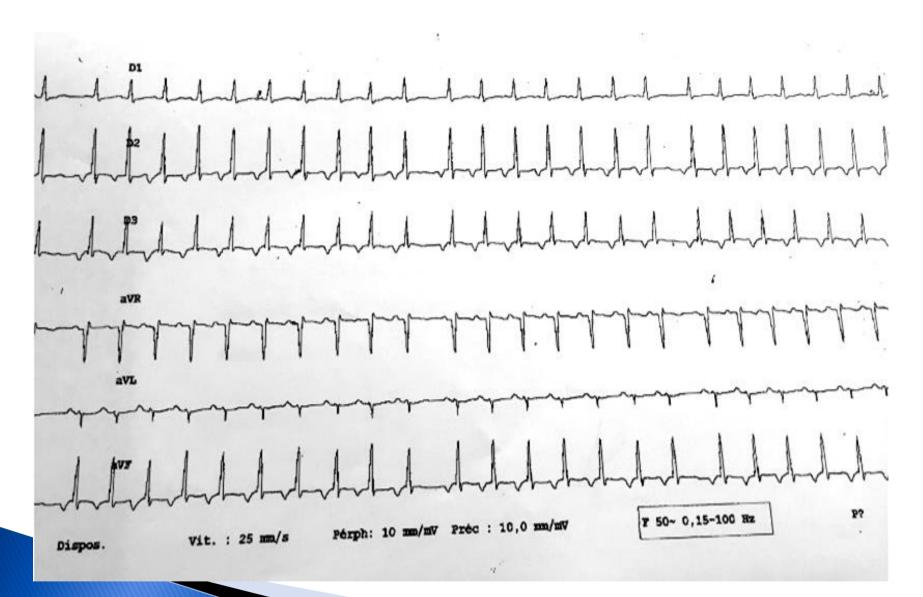
Coronary sinus ostium ?

- He was admitted in a first medical center
- EP Study + Carto 3D system : focal atrial

Tachycardia originating from the coronary sinus

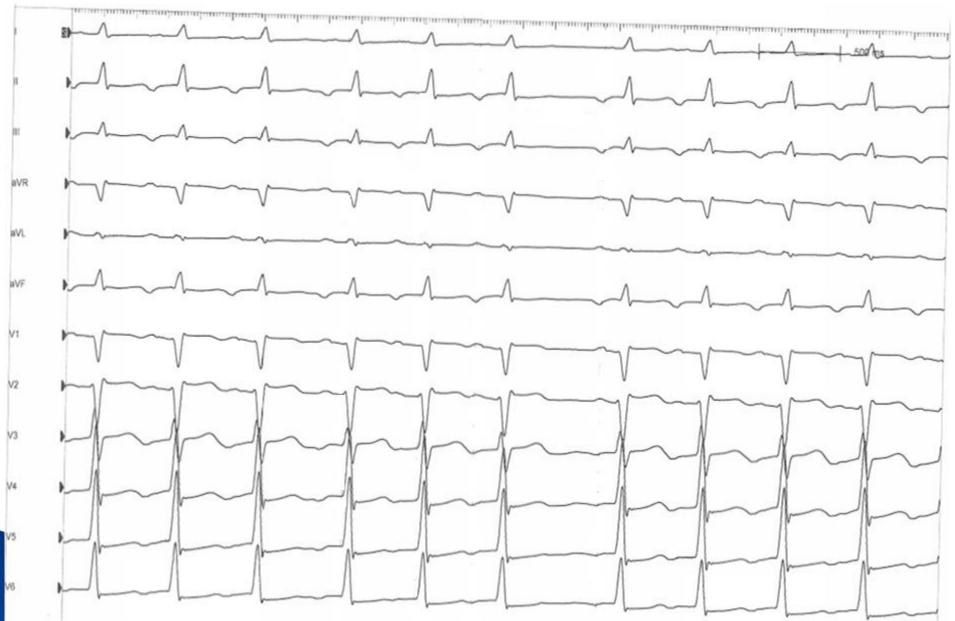
ostium.



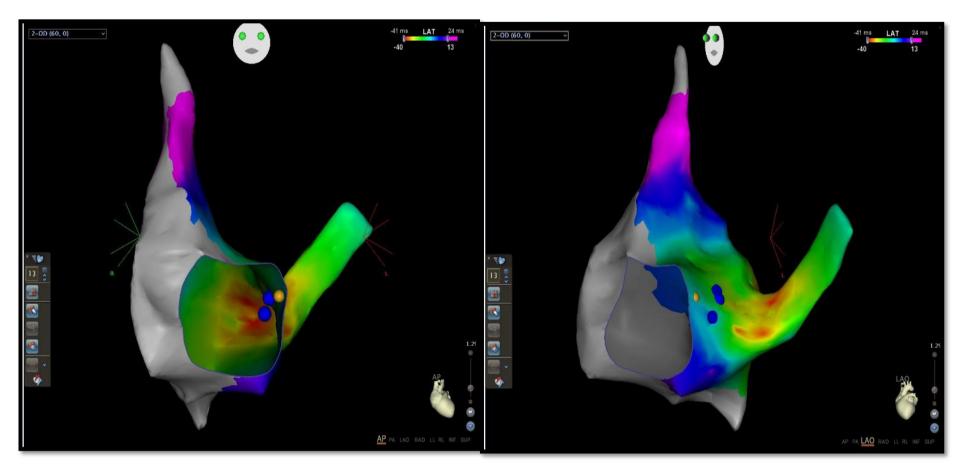


- Admitted in our center 4 months later for dyspnea
- Physical examination : Heart failure (NYHA II-III)
- Tranthoracic echocardiography : LVEF = 25%
- ECG ...

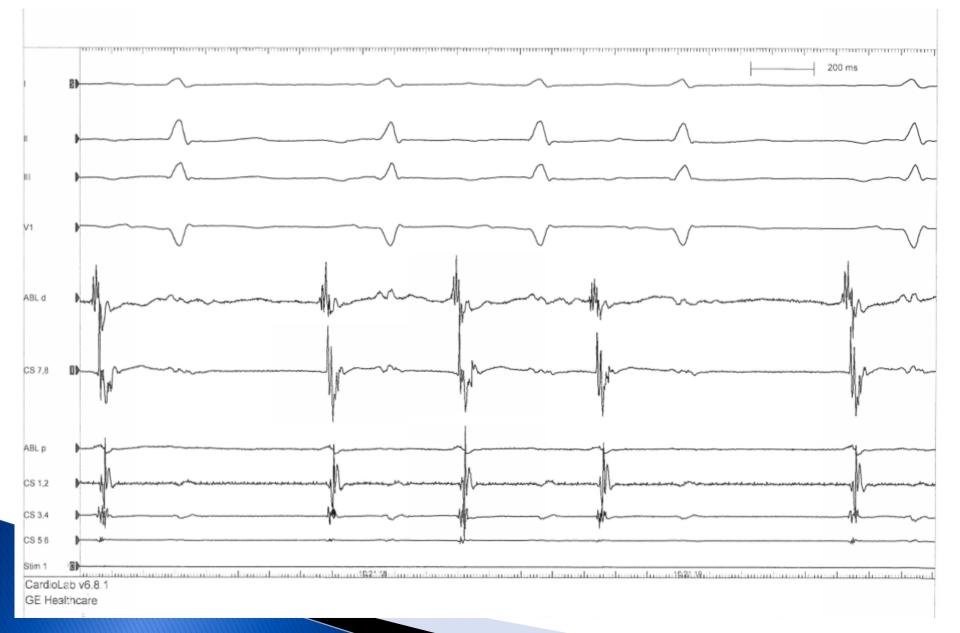
ECG



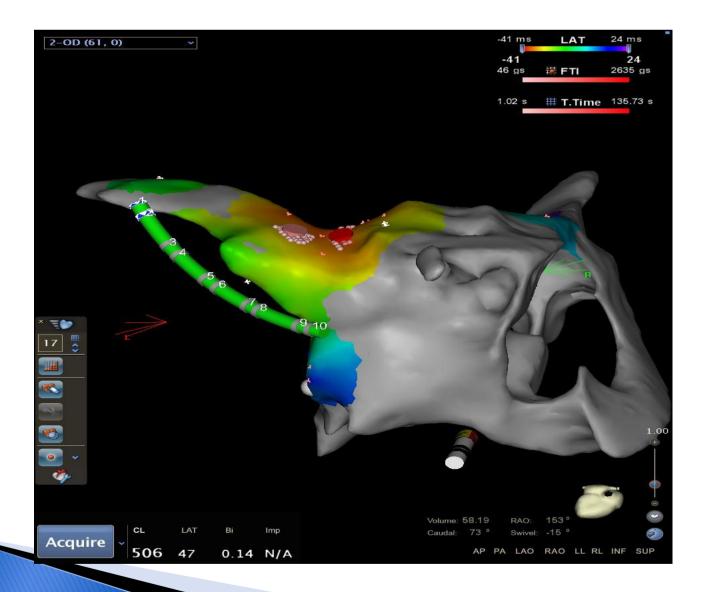
Right atrial mapping...



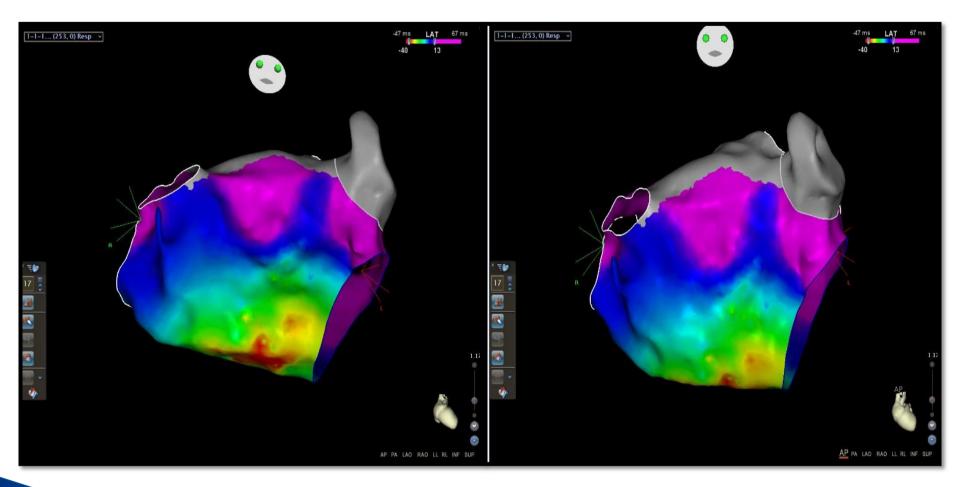
Right atrial mapping...



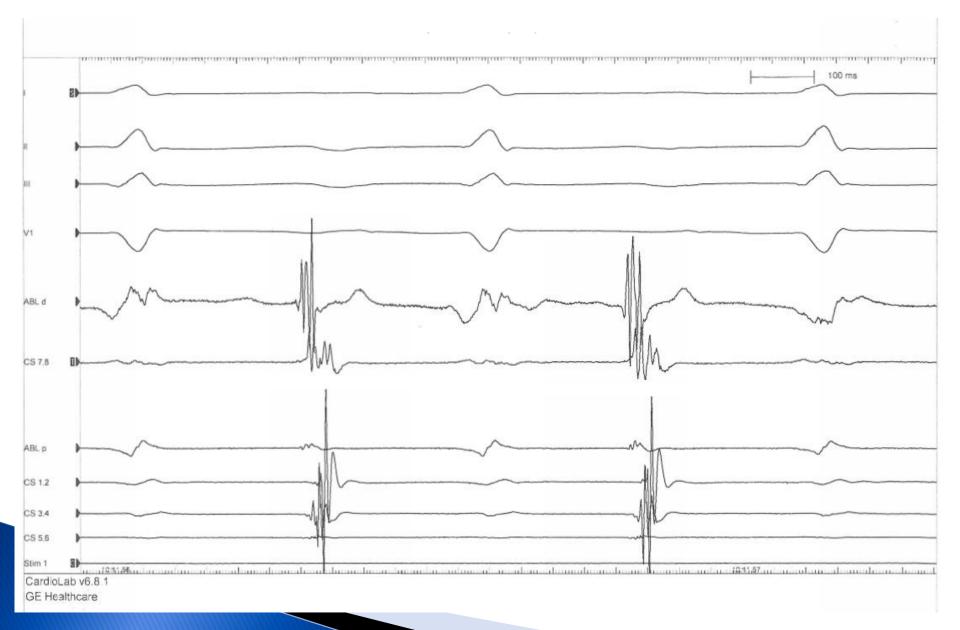
Right atrial ablation



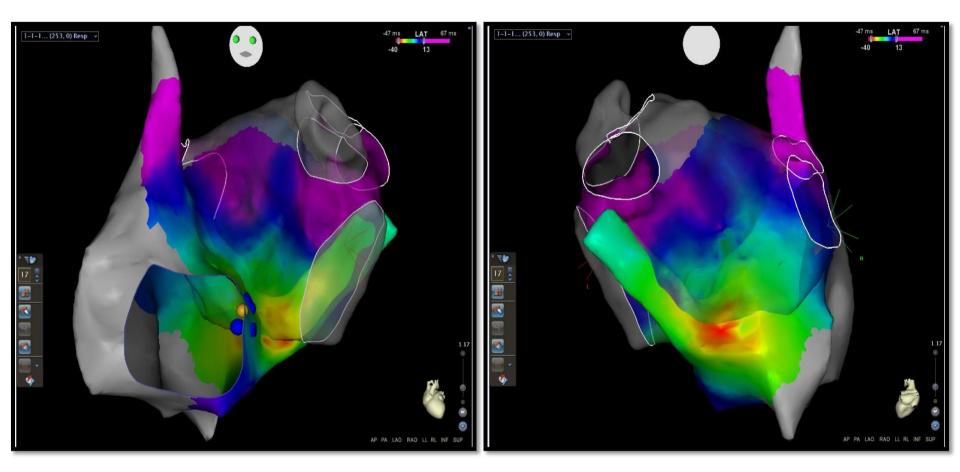
Left atrial mapping ...



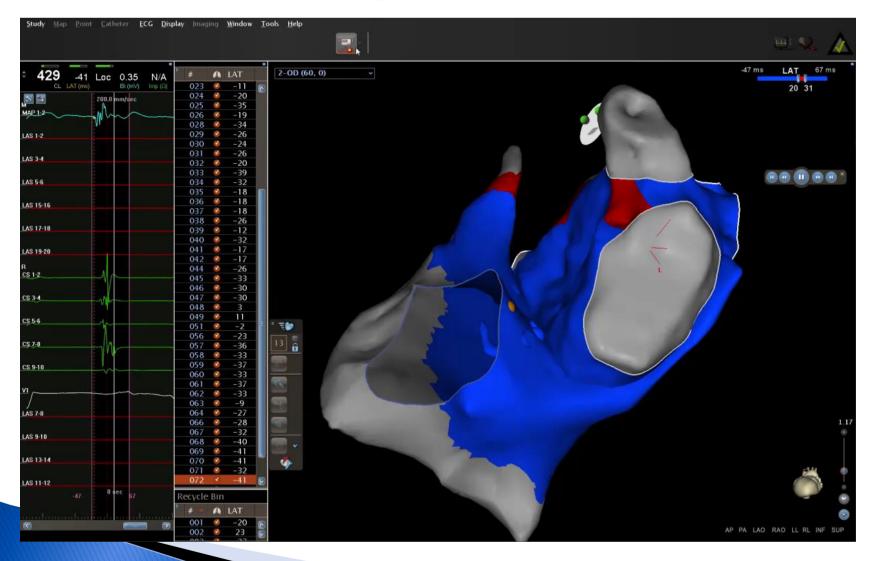
Left atrial mapping...

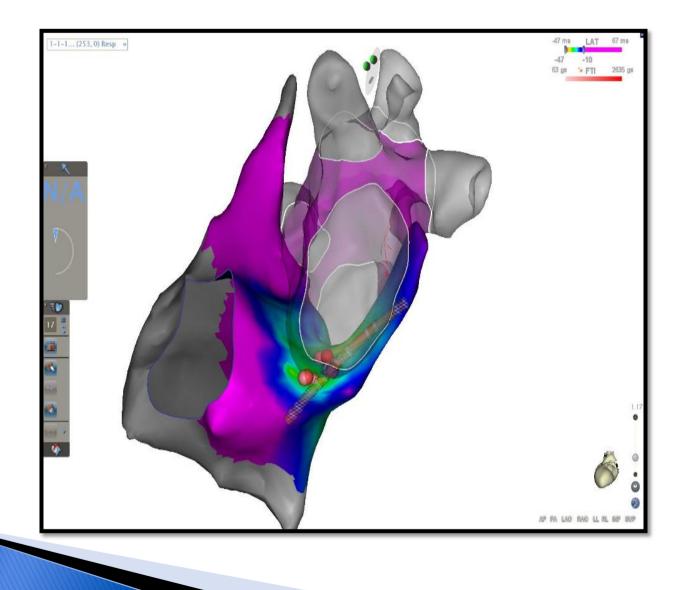


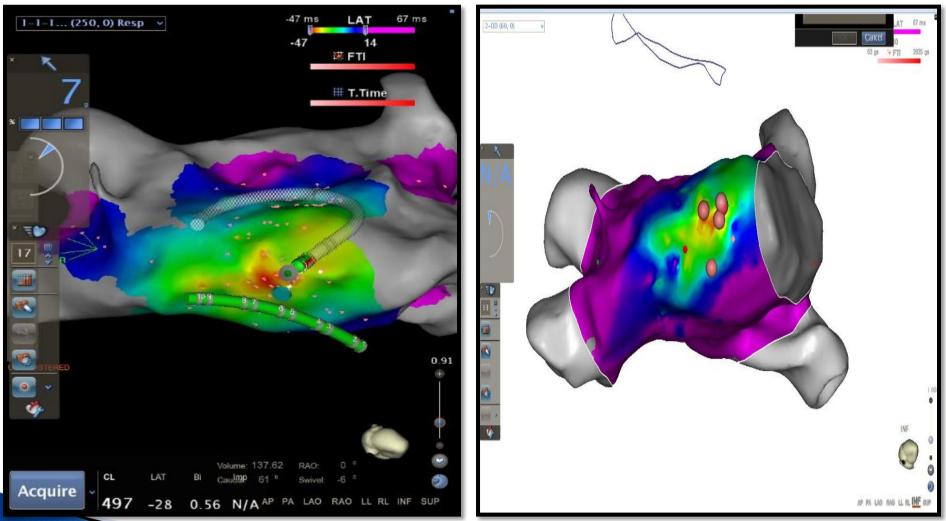
Biatrial mapping

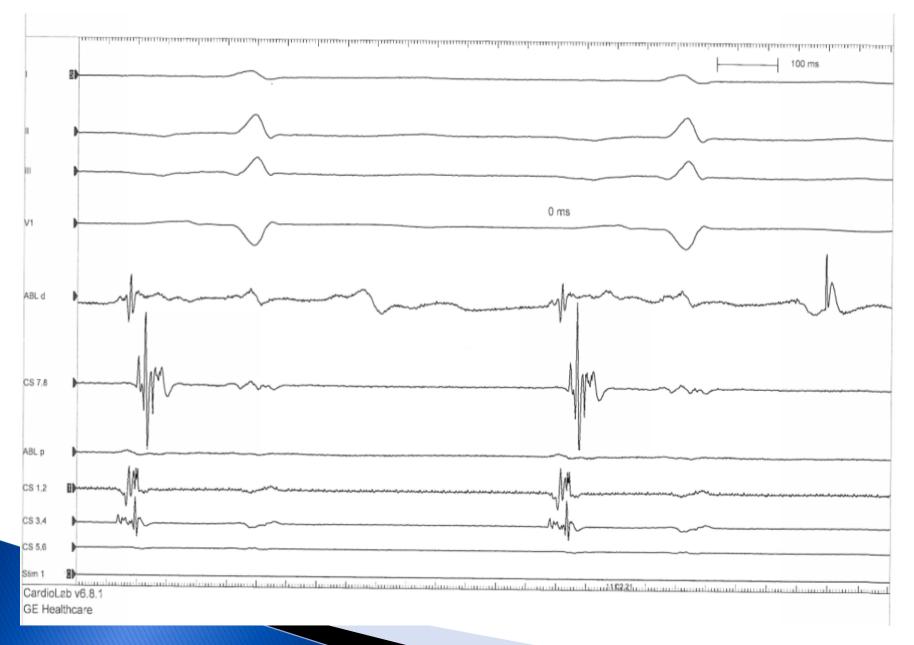


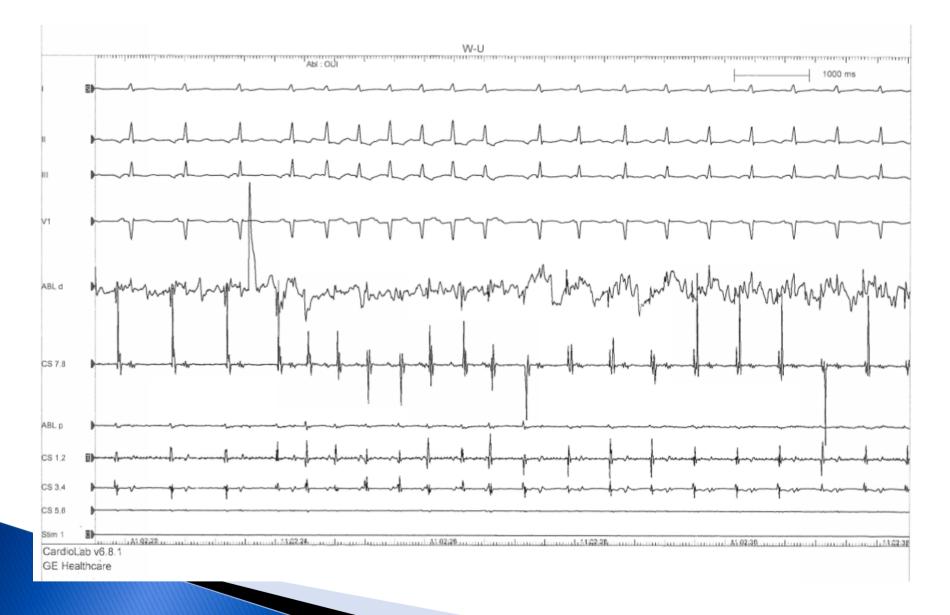
Biatrial mapping : Activation card



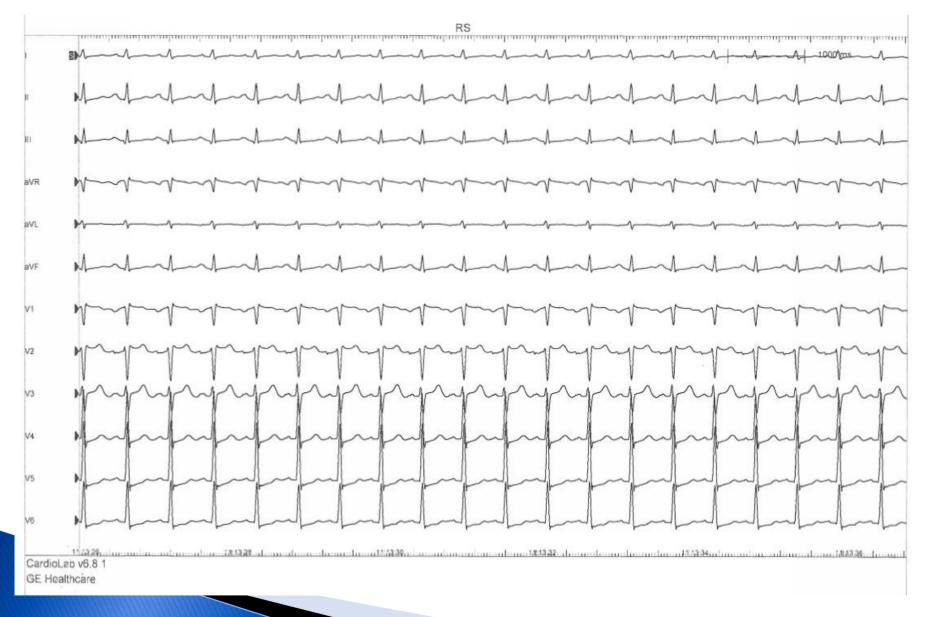


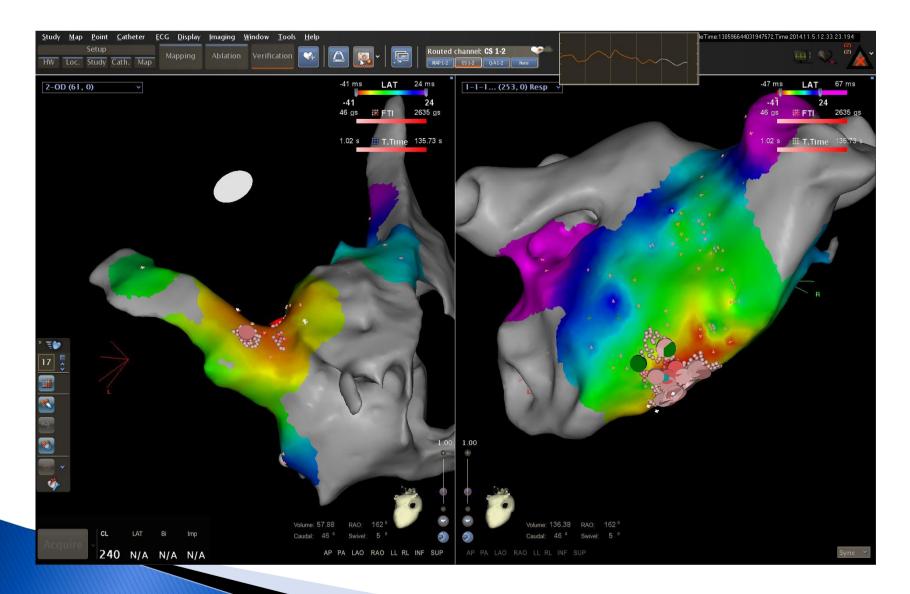






Finally ...





Clinical outcome

- 3 months later
- Sinus rhythm
- Normalization of LVEF

Conclusion

Localization of atrial tachycardia is not so

obvious

- Anatomical proximity of some cardiac structures
- Changement of anatomic approach should be

considered (RA \rightarrow LA) in case of ablation failure

Thank you for your attention