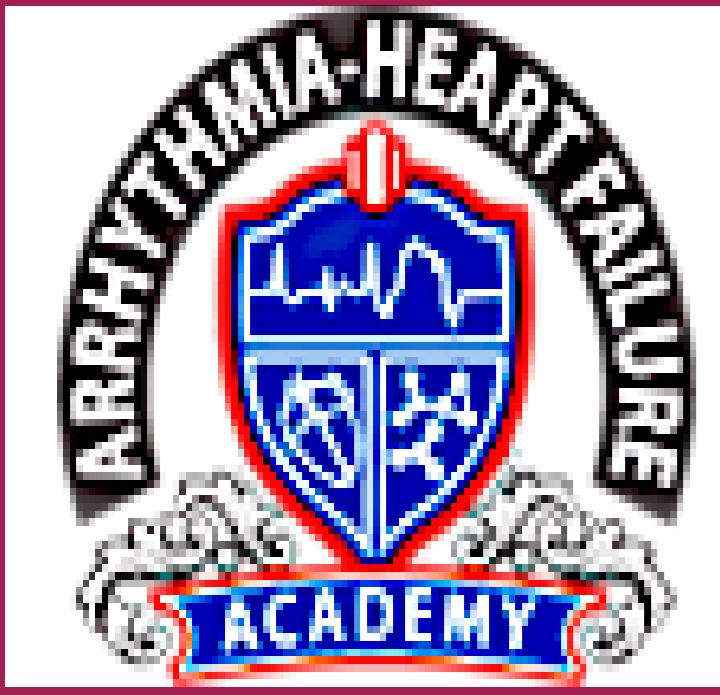


Dual Tachycardia- An EP Challenge

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INTRODUCTION

- Typical Atrioventricular nodal reentrant tachycardia (AVNRT) is the most common regular supraventricular tachycardia (SVT) in clinical practice.
- AVNRT is known to coexist with idiopathic ventricular tachycardia (VT) typically outflow tract VT.
- Occasionally AVNRT may coexist with atrial tachycardia making the EP study and the ablation procedure challenging especially when the origin of the AT is nearer the sinus node.

CASE PRESENTATION

A 63-year-old female with no comorbidities and a structurally normal heart presented with recurrent palpitations. The baseline 12-lead ECG was normal

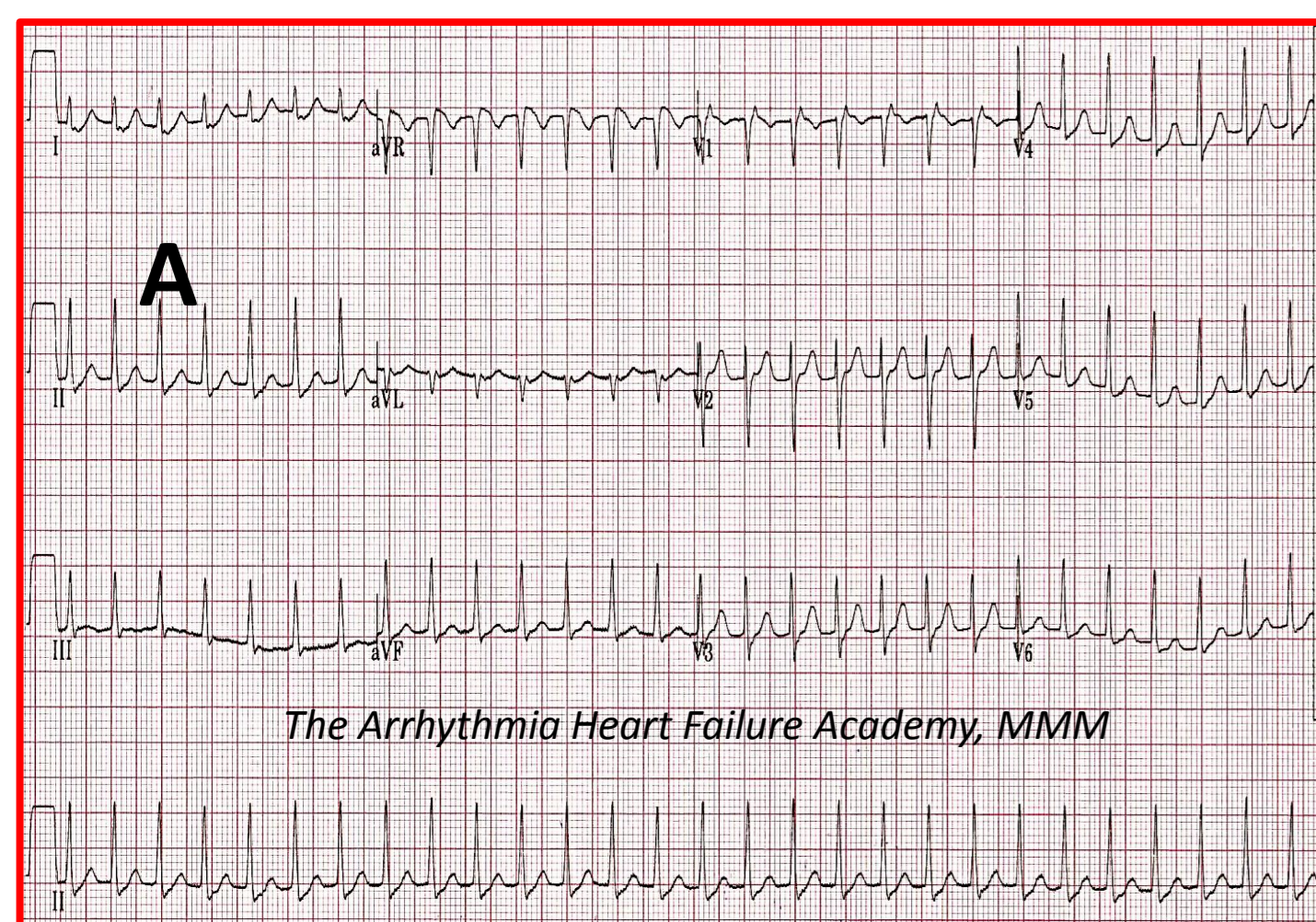


Figure A: 12 Lead ECG- Short RP tachycardia



Figure B: A on V tachycardia showing VAV response

Another narrow complex tachycardia with long RP was induced with programmed atrial extra stimulus repeatedly with warm up and cool down.

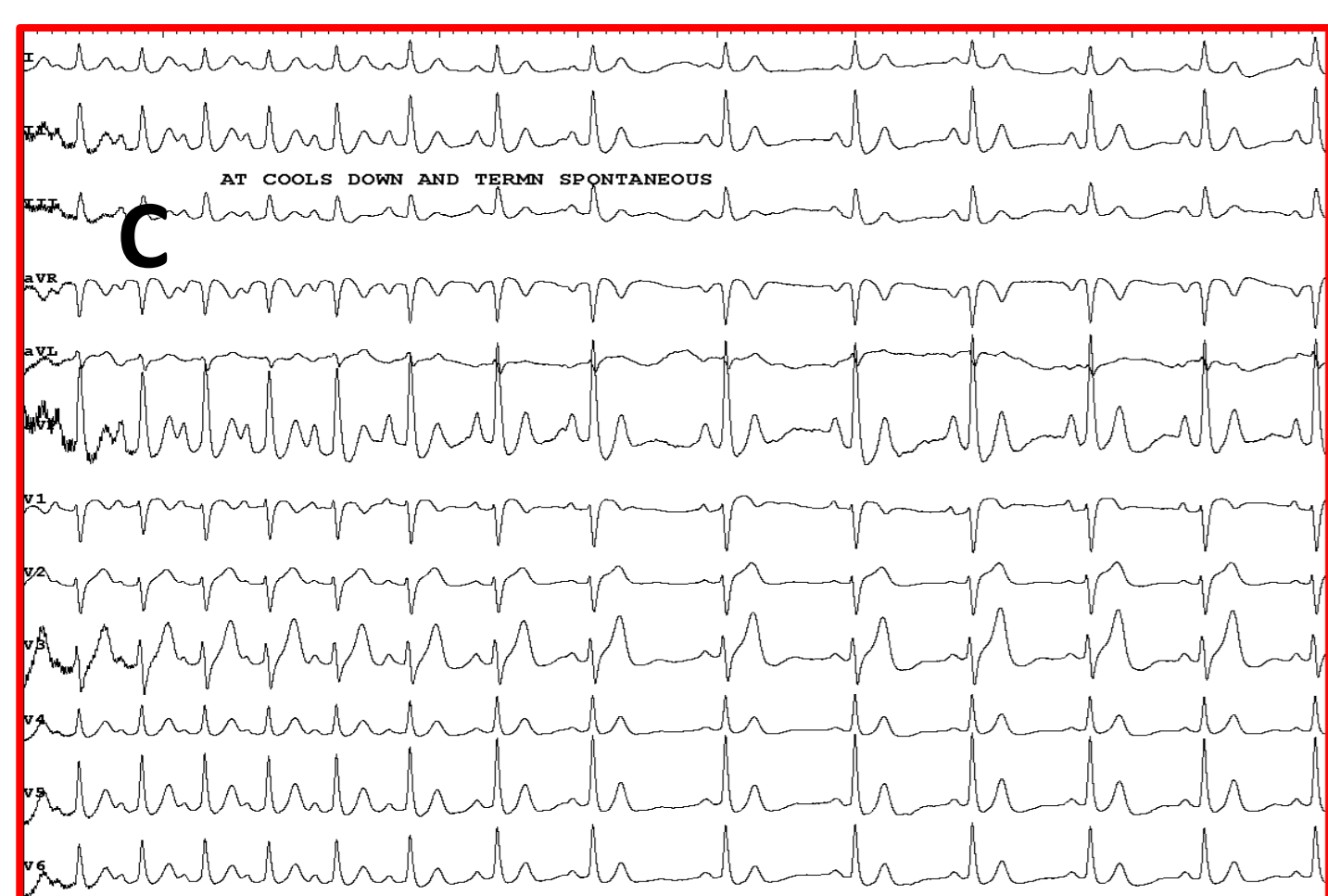


Figure C: Atrial tachycardia- P wave morphology was similar to sinus P wave.

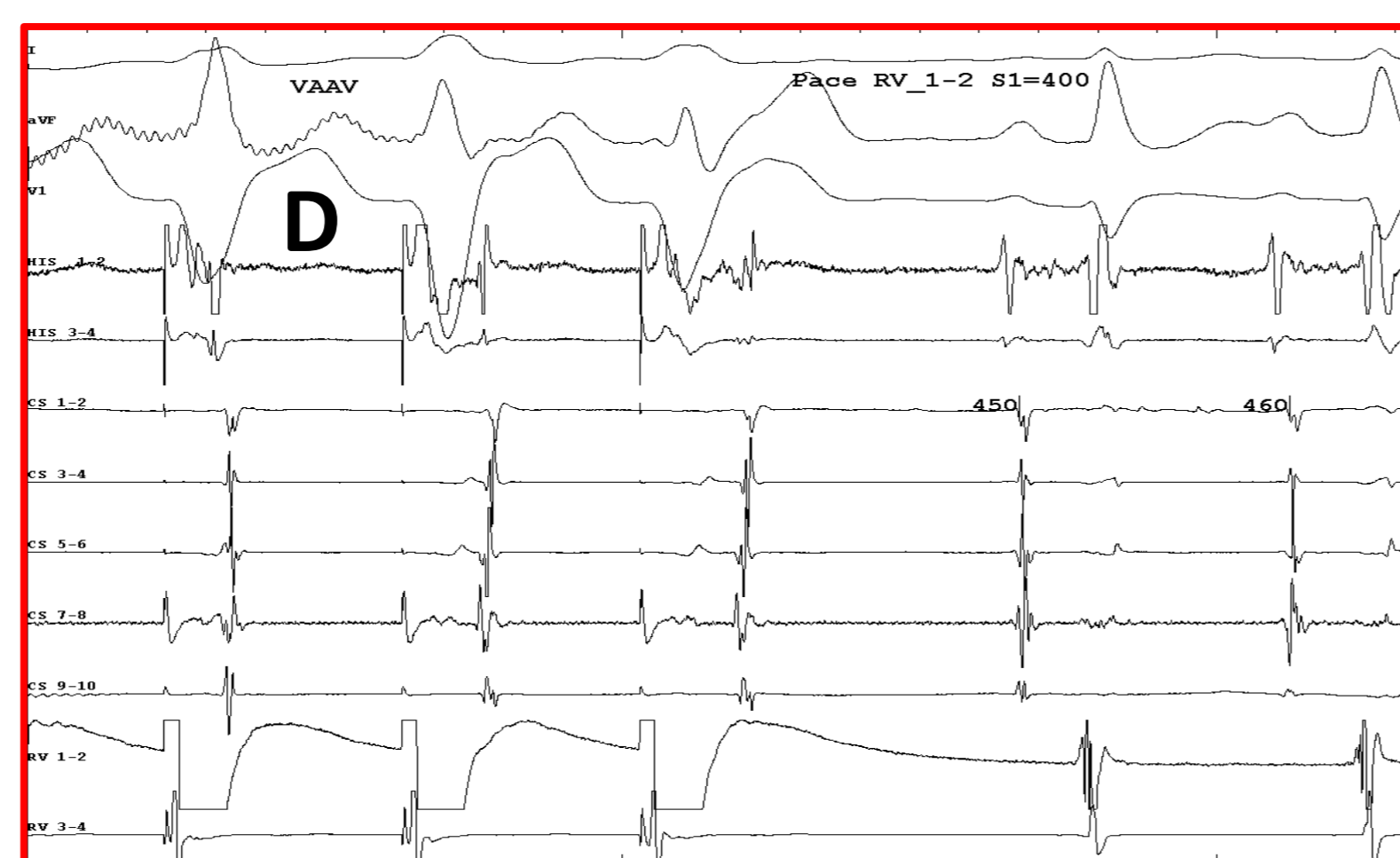


Figure D: RV entrainment shows VAAV response

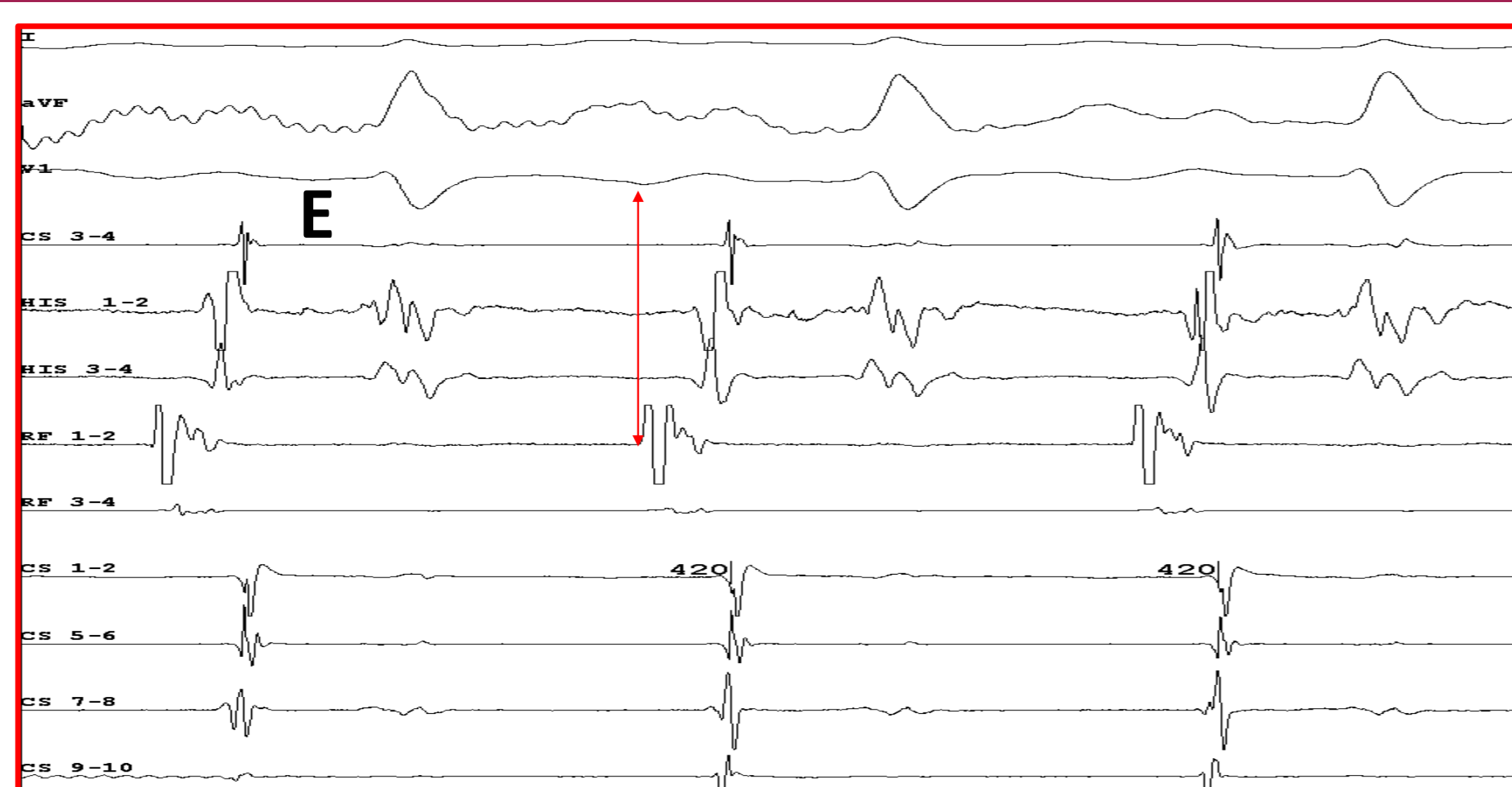


Figure E: Earliest atrial activation recorded in the RF catheter during the tachycardia

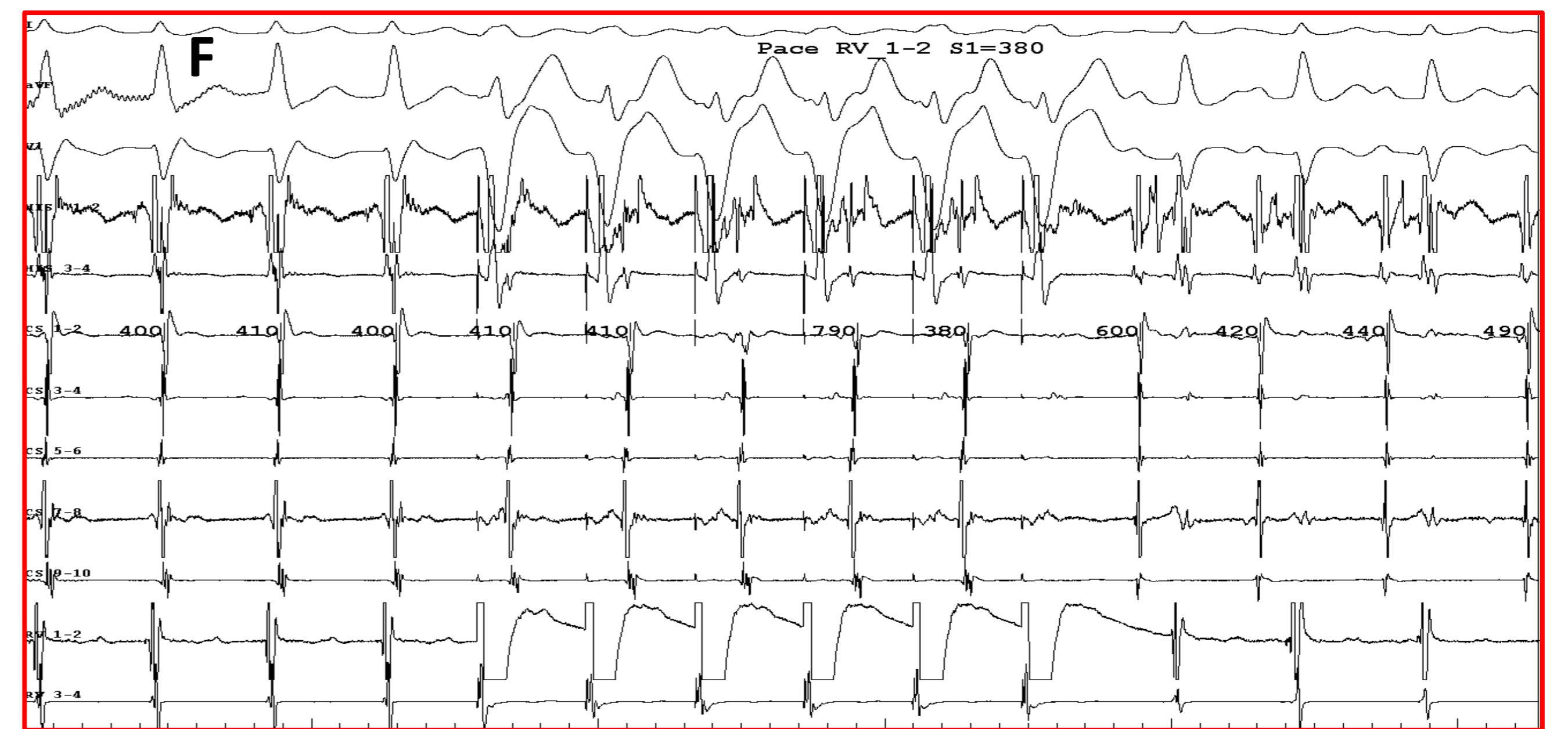


Figure F: Transition between ongoing AVNRT and AT during EP maneuvers to assess arrhythmia mechanism made the procedure challenging

Successful ablation of the slow pathway and AT focus

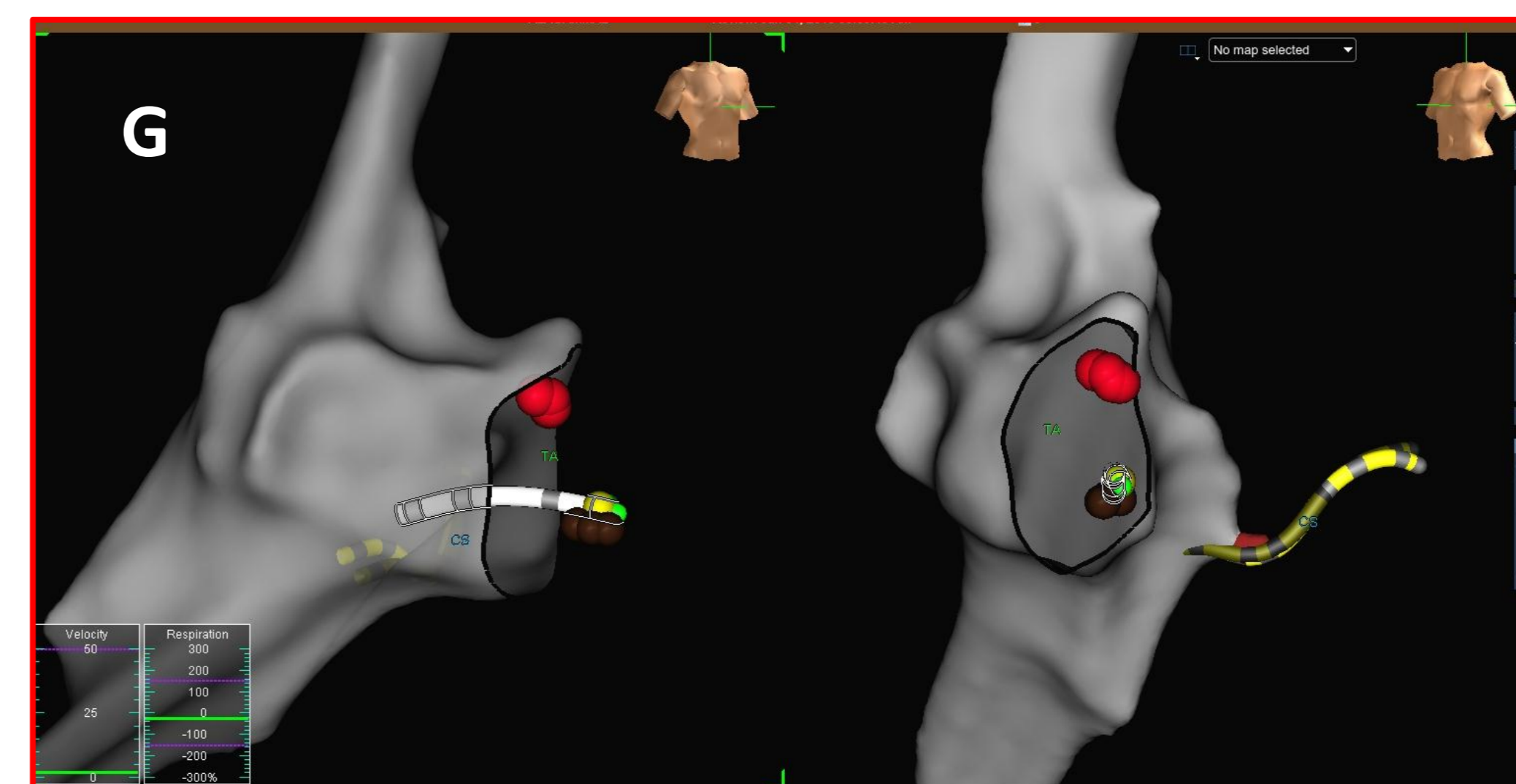


Figure G: Slow pathway ablation was performed initially.

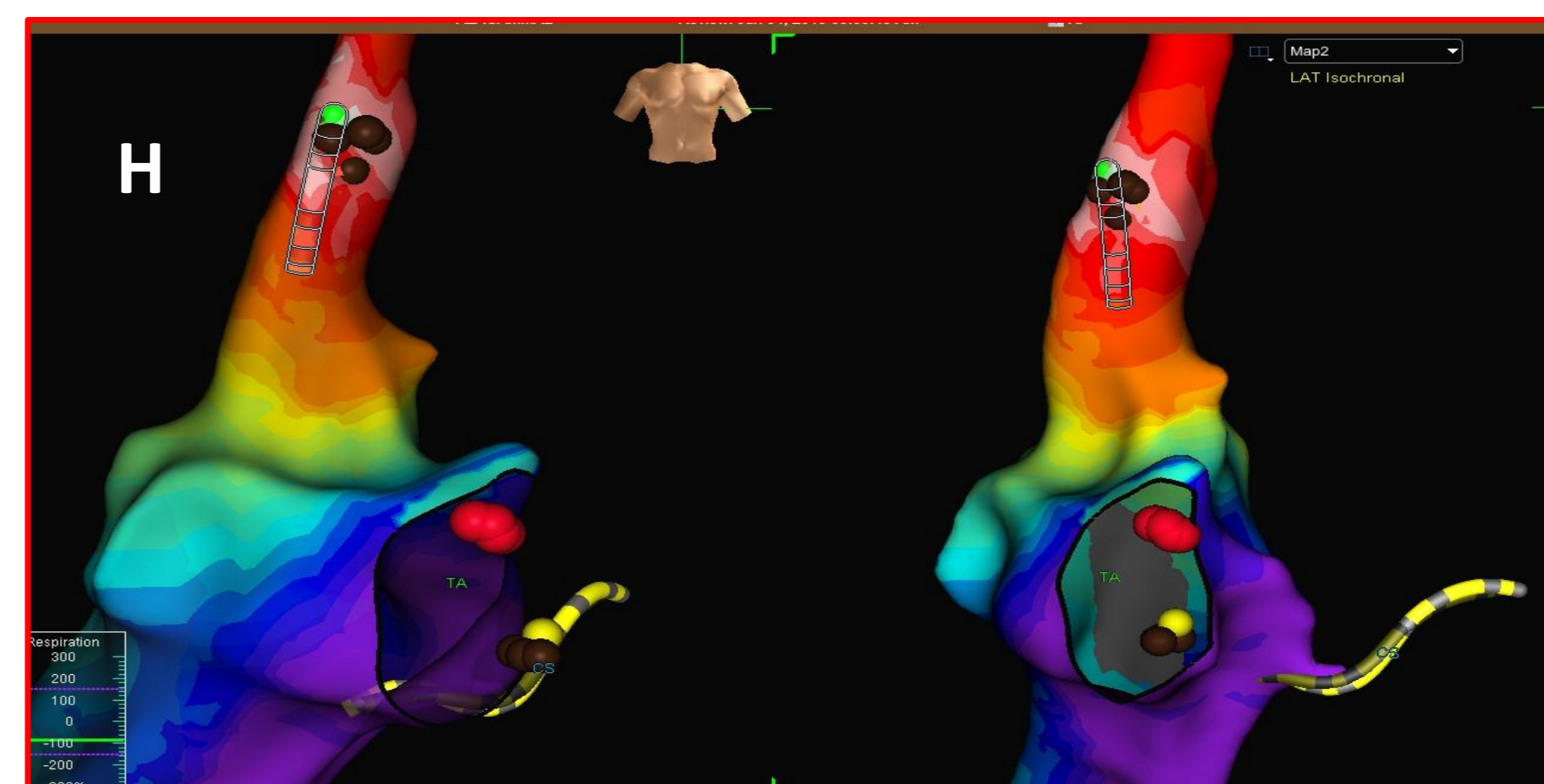


Figure H: The site of AT origin and ablation



Figure I: Successful atrial tachycardia ablation

CONCLUSION

- We report an uncommon coexistence of typical AVNRT with focal AT.
- The ablation procedure can be challenging because of initiation of another tachycardia while performing diagnostic maneuvers for one tachycardia.
- Our case was more challenging since the origin of AT was nearer the sinus node.