Not so typical atrial flutter

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Patient summary

- 55 year old man
- Tetralogy of Fallot
- Previous RVOT patch, pulmonary valve replacement and tricuspid valve repair
- Incessant atrial flutter
- Deteriorating exercise tolerance
- Previous unsuccessful ablation 2015
Venous anatomy
- GA
- Steerable deca via RFV for reference and geo collection
- HD grid via R IJ
- Tacticath SE DF via R IJ
Arrhythmia Diagnosis

- RA from the R IJ
- Re-entrant map
- RAI Setup
- HD Wave
- RAI length and position 270ms – trigger cs 5-6

General Workflow
- Tachy mapping with HD grid
- CS ref min,
- HD grid –dv/dt
- Under GA

Key Parameters Settings
- System Reference
- Low Voltage ID 0.15 mV
Counterclockwise flutter 290ms Re-entrant Map
Propagation map
• Ablation was performed with Tacticath SE DF from R Internal Jugular vein.

• Ampere settings: 35W 30Flow 48D

• Automark metrics:

• LSI 4,5,6 lesion size 5mm unless below 4 LSI, 3mm
CS paced map post ablation to prove block
Conclusions

• Demonstrates the utility of the HD Grid mapping catheter to map a common arrhythmia in complex anatomy
• Keys to successful ablation in complex atrial substrates
  1. Be prepared for surprises
  2. Detailed substrate map
  3. Accurate activation map
  4. Traditional EP techniques
     • Entrainment mapping
  5. Effective, durable ablation lesions