

The future of AF ablation - same-day discharge?

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Barts Heart Centre

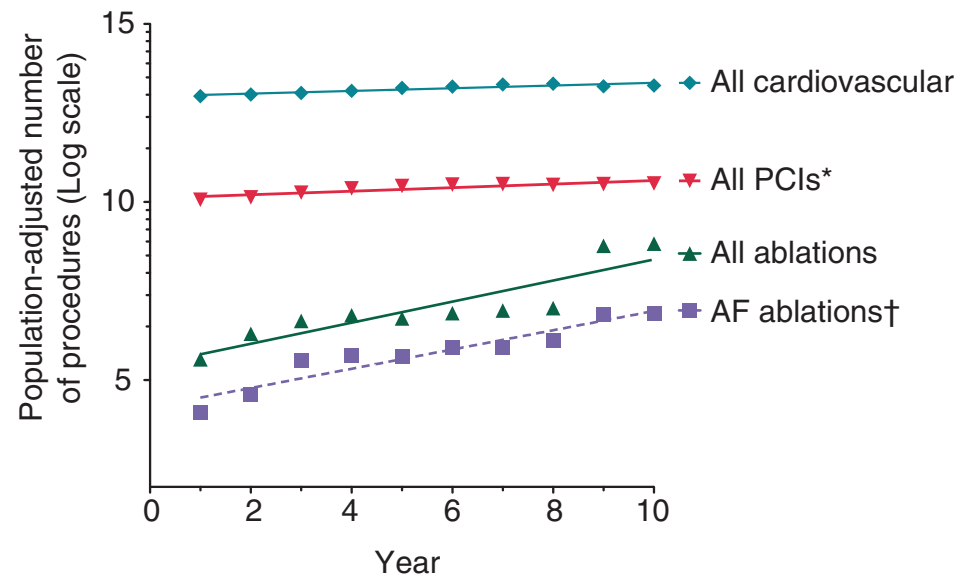
Barts Health
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Same day discharge for AF ablation

Why?

- ↑demand
- Limited, experienced centres
- Overnight beds ↓
- COVID, chronic disease



Advantages of day case ablation

- Easier to staff (no overnight shifts)
- Cheaper to run (day case vs overnight)
- Predictable - beds “ring-fenced” not occupied by emergency admissions
- Team “ring-fenced” and may perform better



Disadvantages - day case AF ablation

- Late complications
- Finding beds for early complications
- Use of operating room limited by recovery time
- Greater burden on community care
- Perverse financial incentives to keep patients overnight



Minimising complications

- Technique
- Consistency of approach
- Staff experience
- Patient selection



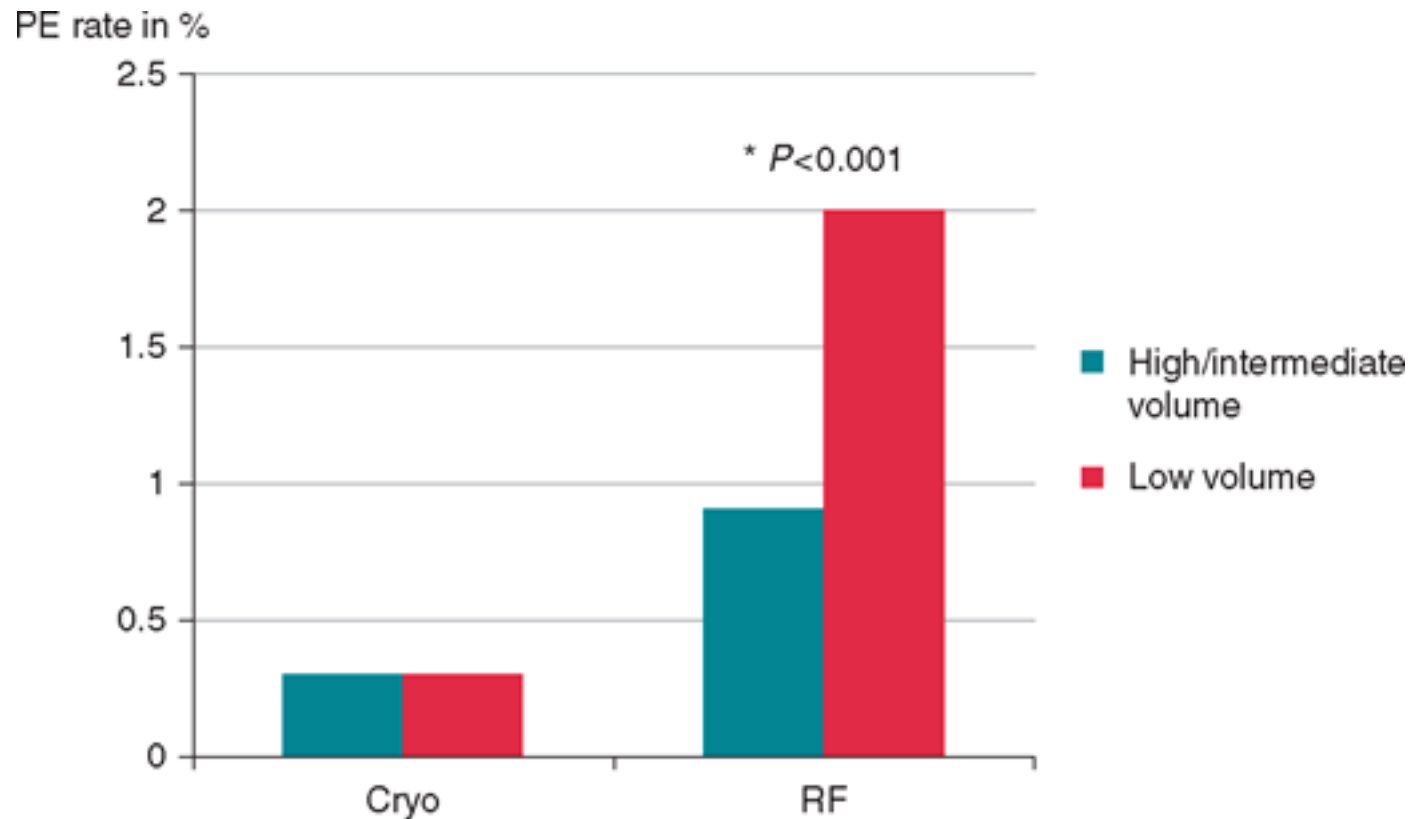
Technique

- Point by point - with skill can achieve great results
 - Cavitation possible, catheter/sheath perforation possible
- Balloon - less dependent on skill and experience
 - mapping wire perforation possible, sheath perforation possible



Technique

- n-21,141 procedures in Helios registry



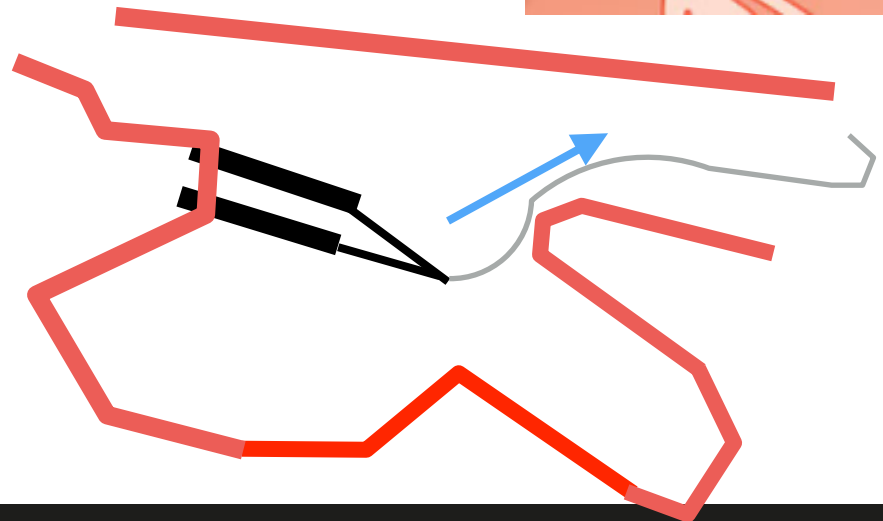
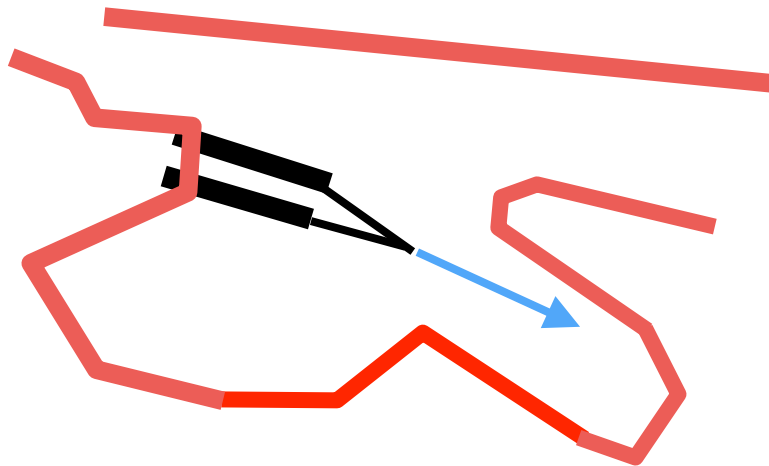
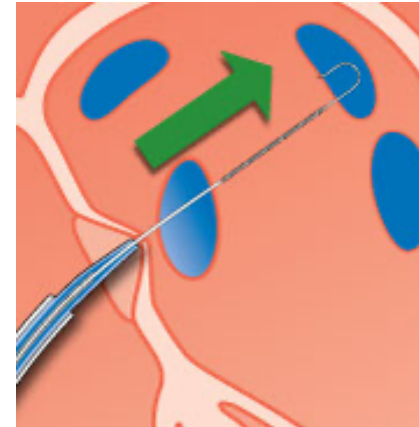
Technique

- Whatever you do make sure you are good at it and focused on:
 - prevention of tamponade
 - avoiding stroke - uninterrupted anticoagulation

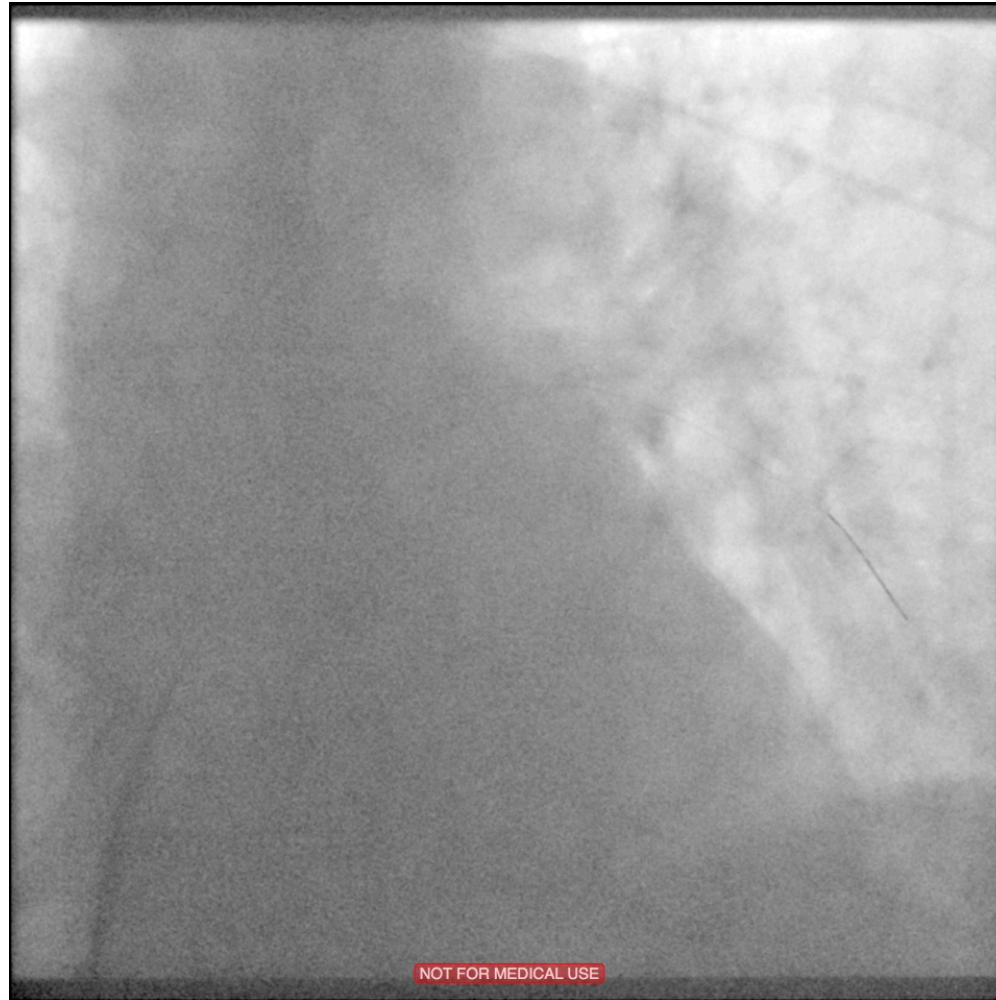


Technique - transeptal puncture

- Ultrasound guidance (ICE/TOE)
- Safesept guide



Transeptal safesept wire



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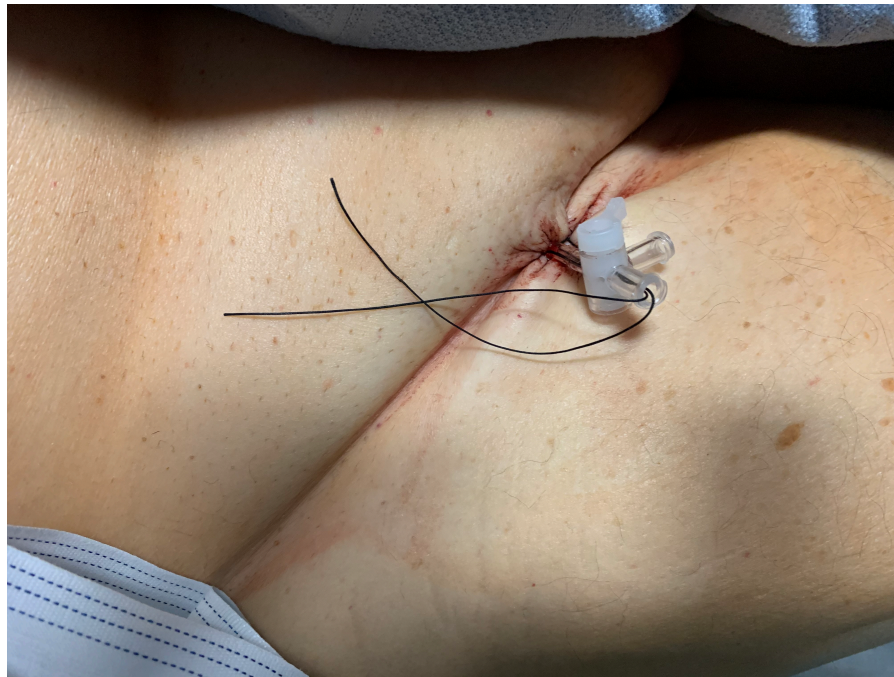
Consistency of approach

- Femoral access - always ultrasound guided
- No subclavian lines
- No arterial lines



Early mobilisation

- Z-suture with 3 way tap
 - More comfortable for patient
 - Can be retightened if needed



Staff experience

- Experienced staff are not required
- Well trained and rehearsed staff are critical
- Elements to consider when training:
 - Normal procedure - same every time
 - Emergencies - tamponade
 - Femoral problems and mobilisation
 - Patient concerns - chest pain, early AF recurrence



Patient selection

- Low risk of post-op respiratory problems
- Someone at home
- Someone to take them home
- Not a contraindication:
 - Obesity
 - Frailty
 - Underlying structural heart disease



Patient selection

- When starting your program:
 - Patients complaint with risk reduction
 - Paroxysmal AF
 - Patients with high symptoms and low risk
 - Patients able to comply with instructions
- Consider engaging and involving your referrers



Other things to consider

- Anaesthetic:
 - Short acting IV anaesthetics ideal, if not delivered by anaesthesiologist then trained anaesthetic nurse
 - Local delivered on puncture needle with ultrasound down to vein
- Procedure simplification
 - No ACT
 - Consistent anticoagulation policy (uninterrupted)



Other concerns about day case AF ablation

- What about late tamponade?
 - a 12 hour overnight stay won't mitigate
- Femoral re-bleeds
 - Possible but good patient and family instructions to self compress will mitigate
 - Told not to call an ambulance but be patient and call us



Day case vs surgical centre

- Day surgery centres outperform traditional centres

	Local	Regional cardiac	p value
procedure time (mins)	63.5±1.1	101.7±2.9	<0.0001
fluoroscopy time (mins)	5.5±0.2	12.6±30.6	<0.0001
fluoroscopy dose (mGy)	17.2±2.1	97.6±14.6	<0.0001
comps (%)	15 (5.4)	17 (6.2)	ns



Stand alone day surgery centres

- Overnight beds not needed to provide AF ablation
 - 70 AF ablations over 12 months
 - 44% persistent
 - 2 overnight admissions for persistent groin ooze
 - success at 3 months 81%



Conclusions

- Day case AF ablation is feasible and safe
- It is a necessity if we are going to adapt to:
 - Increasing demand
 - Decreasing resources
 - Need to separate patients from inpatient facilities - COVID
- Standardisation, rehearsal and accounting for human factors will get the best out of this approach

