

AF ablation outcomes for Prof Schilling 2013/14

We regularly audit our practice.

We use these data to relentlessly strive to improve our outcomes.

Our primary focus is having the lowest possible complications and the best safety record.

Our secondary aims are to produce second to none clinical outcomes and excellent patient experience.

We have already used the results of this audit to change some elements of our practice because we are believers in the principle of “aggregation of marginal gains and that small improvements in a number of different aspects of what we do can have a huge impact on the overall performance of the team”⁽ⁱ⁾.

We hope you find our full and frank publication of our data helpful. Please don't hesitate to come and talk to us about your AF and how we can help you.

i) Sir Dave Brailsford performance director of British cycling

Background

- Procedure data including complications is collected by the hospital audit system independently of Prof Schilling
- Follow up data is collected by Prof Schilling with both outpatient clinic outcomes and telephone follow up
- Success is defined as a elimination of symptoms and no AF on ECG or 7 day ECG recording with the patient on no anti arrhythmic drugs
- Partial success is defined as significant improvement but still presence of symptoms or patient requiring previously ineffective drugs to suppress symptoms
- Failure is defined as no improvement in symptoms or AF on either 7 day ECG or other ECG with or without symptoms
- 2013/14 is audited so that there is at least a one year follow up to give really robust outcomes
- major complications are defined as anything that delays discharge home, causes unpleasant symptoms or needs some form of treatment or investigation
- Procedures are divided into paroxysmal AF which is expected to have better outcomes and persistent AF which is more complex to treat
- Persistent AF lasts for more than 7 days and/or needs a cardioversion. Paroxysmal AF stops without needing a cardioversion

Procedure data vs UK

	Procedure time (mins)	X-ray fluoroscopy time (mins)	X-ray dose (cGy)
Paroxysmal	108	3	94
Persistent	163	3	176
Total average	139	3	140
UK Paroxysmal*	173	33	3500
UK Persistent*	220	35	5000

* Data published by another large UK centre

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Outcome data

mean follow up 18 months

	patient numbers	procedure numbers	first time complete success (%)	complete success after repeat procedures (%)	overall success (partial and complete) (%)
Paroxysmal	70	85	69	83	87
Persistent	94	152	38	63	78
Total	164	237			

* No comparator because no UK centre publishes their outcomes in this way

Outcome data vs UK

	stroke rate (%)	Pericardial bleeding/tamponade rate (%)	Death (%)	major complications and details
Paroxysmal	0	0	0	1 pt with Femoral haematoma and pericarditis 1 pt with transient delayed stomach emptying
Persistent	0	1	0	1 pt with tamponade 1pt with femoral false aneurysm needing repair 1 pt with burn on skin
Total	0	1	0	
UK Paroxysmal*	0	1.3	0	
UK Persistent*	2 (TIA)	0	0	

* Data published by another large UK centre

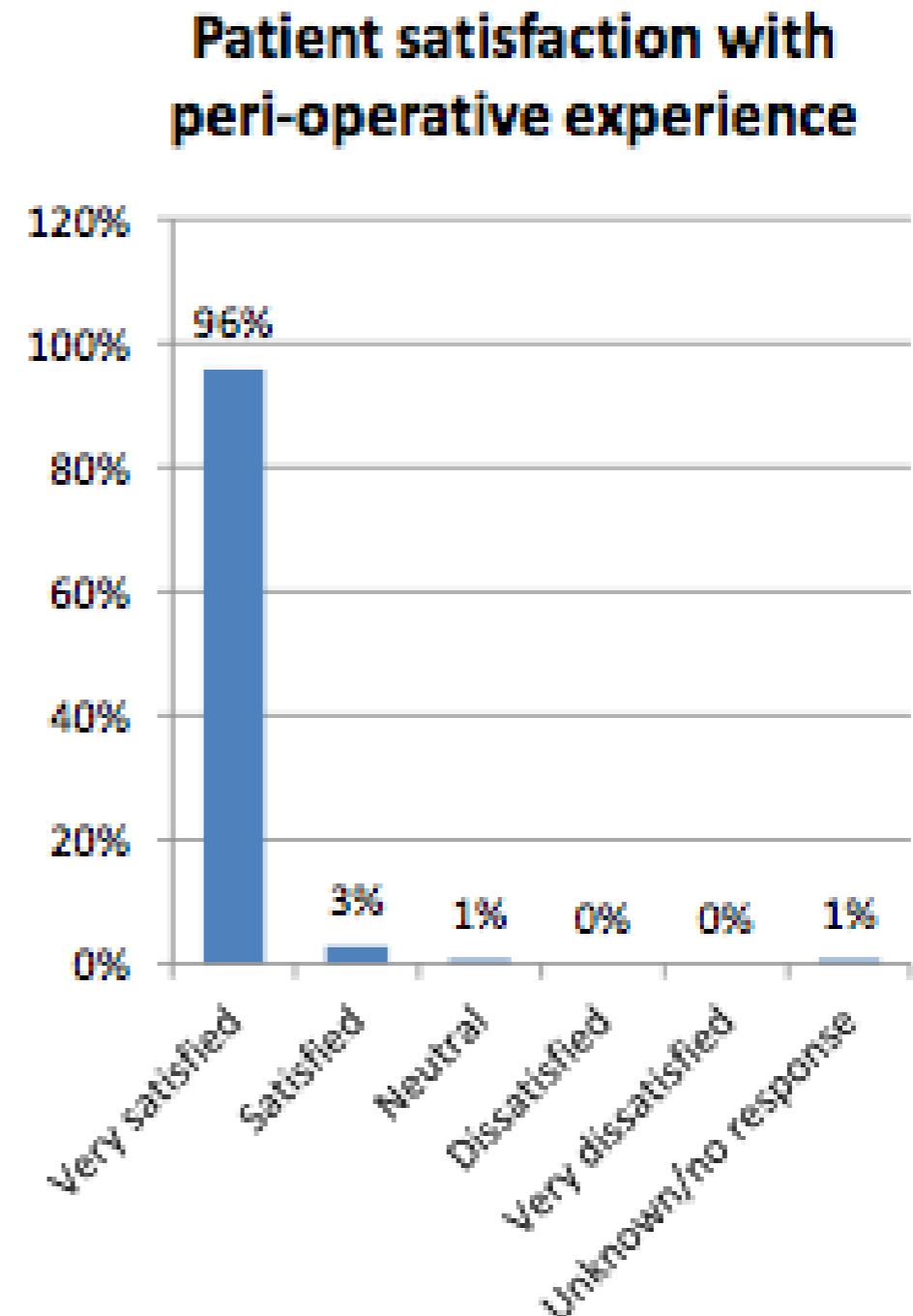
Outcome data vs USA

	stroke rate (%)	Pericardial bleeding/tamponade rate (%)	Death (%)	major complications and details
Paroxysmal	0	0	0	1 pt with Femoral haematoma and pericarditis 1 pt with transient delayed stomach emptying
Persistent	0	1	0	1 pt with tamponade 1pt with femoral false aneurysm needing repair 1 pt with burn on skin
Total	0	1	0	
US	1.2	2.24	0.47	

- Data from 93801 AF ablations in USA
 - Deshmukh et al Circulation 2013

Patient Satisfaction data

- Data collected post operatively for all patients undergoing AF ablation with Prof Schilling and Dr O'Brien (anaesthetist)



Conclusions

- Most UK centres outperform the average safety record within the US (most centres performing AF ablation in the US are not high volume)
- Prof Schilling and his team outperform most/all reputable published results for safety and use of x-ray
- His team are the only one that consistently and openly publishes their outcome data over long follow up with robust (ECG and symptoms) end points