Patient Sticker

Name:

Hospital No.

South Tees Hospitals NHS
NHS Foundation Trust

Atrial Fibrillation Pathway

Please complete only for cardiac surgical patients who go into AF for the first time.
Use this as medical documentation of the episode.

ONSET (to be completed by SPN / SCP / doctor)

Date: ..... / ..... / 20 ..... **Time AF first identified:** .....

ECG shows				**Rate:**	bpm
Observations:					
Sao2	%	BP	/ mmHg	Most recent K+	mmols

TREATMENT PLAN

Is patient stable? Yes / No

If 'No' seek senior help and consider immediate DC cardioversion
(all patients with a systolic of less than 90mmhg after simple fluid resuscitation should be considered for immediate DC cardioversion.)

DOES PATIENT HAVE A CENTRAL LINE?				
YES		**NO**		
IV Amiodarone (Central line only)	**Prescribed**	**Oral Amiodarone**	**Prescribed**	**Reason not given**
300mg IV. Up to 50mls of 5% Dextrose over 1 hour.	☐	400mg ORAL TDS for 1 day	☐	
900mg IV. Up to 48mls of 5% Dextrose over 24 hours.	☐	200mg ORAL TDS for 1 week. Reducing to BD then OD each week.	☐	
200mg TDS for one week, then 200mg BD for one week then 200mg OD until clinic review.	☐			
K+ Supplements IV aim for blood K 5.0 mmols/l	☐	K+ Supplements oral aim for blood K 5.0 mmols/l	☐	
Magnesium 8 mmols BD IV/oral	☐	Magnesium 8 mmols BD IV/oral	☐	
Enoxaparin 40mg s/c OD	☐	Enoxaparin 40mg s/c OD	☐	

CARDIOVERSION

Formal anticoagulation prior to DC cardioversion after cardiac surgery is not required (provided DC cardioversion takes place within 72 hours of onset)

Proposed date for cardioversion: ..... / ..... / 20 ..... **less than 72hrs onset:** Yes / No

DC cardioversion booked with secretary? Yes / No
(if for the same day you must discuss with a consultant anaesthetist in theatres)

Failure of cardioversion or reversion to AF despite full treatment requires anticoagulation with Apixaban 5mg bd (see table over the page). Remove pacing wires before the first dose.
(In patients with moderate to severe renal impairment consider warfarin target 2-3).
Consider beta-blocker for rate control.

STAMP

Signed: .....

Please file in the patients notes

Atrial fibrillation / flutter

New onset AF is very common following cardiac surgery (30%). It should always be treated promptly. Every attempt should be made to re-establish sinus rhythm by the time of discharge from hospital.

Prophylaxis:

Pre-operatively	Perioperative	Post operatively
Ensure patient is on a beta-blocker	IV Magnesium Sulphate 8mmol (on induction of anaesthesia, and return to ITU)	Oral Magnesium Glycerophosphate/IV Magnesium Sulphate 8mmol twice daily for four days
	MAZE – Load with Amiodarone then reducing dose regime (see below)	Recommence betablocker at pre-operative dose even if paced, unless contra-indicated. (Noradrenaline is not an absolute contra-indication). Aim for potassium between 4.5-5.0 mmol/l.

Treatment:

1. Optimise fluid balance – Maintain good oxygenation – rule out sepsis
2. Check K level and give potassium, aim for a level of 4.5-5.0 mmol/L
3. If the patient is still intubated consider a DC cardioversion
4. If BP remains < 90mmHg after fluid resuscitation or patient is still intubated consider immediate cardioversion.
5. Start amiodarone reducing dose regime (see below)
6. Continue Enoxaparin 40mg SC once daily.

Amiodarone	IV (Central Line)	Oral
Loading	300mg over 1 hour, then 900mg over 23 hours	400mg eight hourly over 24 hours
Reducing Dose Regime	200mg TDS for one week, then 200mg BD for one week then 200mg OD until clinic review	

Cardioversion:

1. All patients remaining in AF despite treatment should be cardioverted within 72 hours
2. After 24 hours of Amiodarone book onto next day DC cardioversion list. (Book prior to 4pm, NBM orders should be directed by the anaesthetist).
3. Formal anti-coagulation prior to cardioversion after cardiac surgery is not necessary, (provided cardioversion takes place within 72 hours of onset of AF).

Persistant AF:

1. AF despite treatment requires anticoagulation.
2. Apixaban should only be started once pacing wires are removed
3. Patients should remain on only one antiplatelet agent in conjunction with anticoagulation.
4. Follow up routinely at 6 weeks in OPD – with referral back to referring cardiologist for further cardioversion and management if still in AF. Local patients can be booked as a day case for cardioversion on a friday afternoon. If the patient has reverted to sinus rhythm stop amiodarone and Apixaban/warfarin.

Apixaban	Warfarin
Atrial fibrillation • Apixaban 5mg BD • Apixaban 2.5mg BD if over 80 years with body weight <60kg OR eGFR 15-29 ml/min/1.73 N.B. Apixaban can be given if patient has a tissue valve	Consider Warfarin if: • Patient choice • Mechanical Valve • eGFR <15ml/min/1.73

Authors: Broughton, Dunning, Khan, Clark, Van Loo