

Don't Wait to Anticoagulate

ATRIAL FIBRILLATION



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Bristol Clinical Commissioning Group

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OBJECTIVES FOR THE DAY

- > Overview of AF and oral anticoagulants
- > Your experiences/feedback of the project
- Evaluation of project
- Challenging cases with group discussion
- How to sustain improvements
- ≻ Have fun!



AF leads to a FIVE fold increase in stroke risk

An estimated 20% of all strokes are caused by

AF

Barry Manilow has AF **NHS** Bristol Clinical Commissioning Group

> AF related stroke has double the mortality

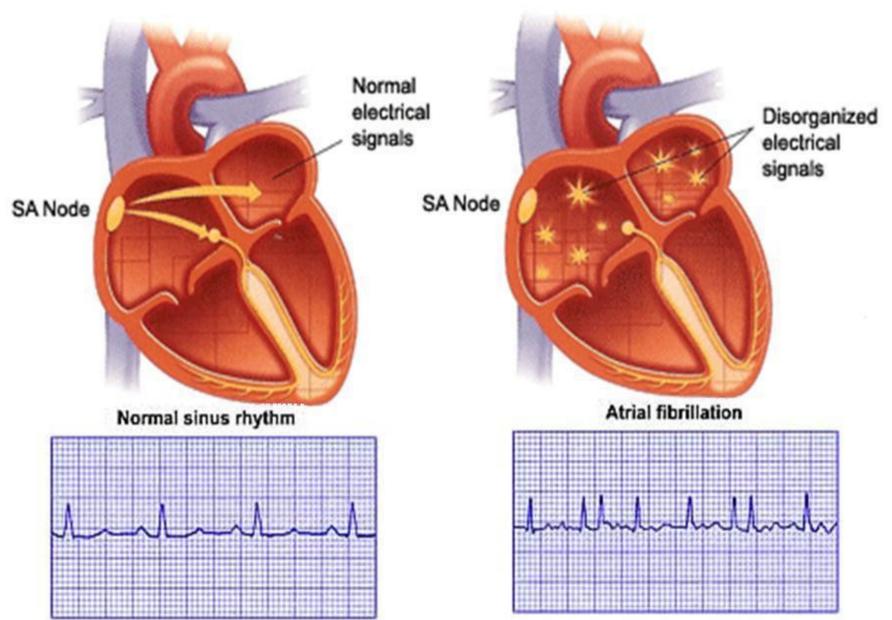
> > 1 in 4 adults over 40 develops AF over their lifetime



Normal conduction

NHS Bristol Clinical Commissioning Group

Atrial fibrillation





AF – WHAT ARE THE PRIORITIES?

➢ Haemodynamic stability

➢ Anticoagulation

► Rate Control

≻ Rhythm Control

DECREASING IMPORTANCE



WHO IS AT RISK OF STROKE?

Risk Stratification						
HAS-BLED bleeding risk score					10-Feb-2017 2	*
CHA2DS2-VaSc Risk Score				10-Feb-2017 7/9	»	
		If CHA2DS2-VaSc	score is:			
1 or more in a man 2 or more in a woman						
Then enter the results from HASBLED and CHA2DS2- VaSc scores on the Don't Wait to Anti-coagulate website below - and print off 2 copies of the personalised stroke and bleeding risks for the patient: one for patient and one for notes						
Don't wait to anti-coagulate						
	Vascular disease	I		5	15.26	
	(prior myocardial infarction, peripheral artery disease or			6	19.74	
	aortic plaque)			7	21.50	
	Age 65–74 yrs	1		8	22.38	
	S ex c ategory (i.e. female gender)	1		9	23.64	



WHO IS AT RISK OF BLEEDING?

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110	00	ᇿᇇ	500	10

HASBLED can be used to work out the modifiable bleeding risks with anticoagulation. A high score should not rule out anticoagulation but be used to **modify** some of the bleeding risks. The HASBLED score can EITHER be worked out by clicking on the hyperlink below, OR working out the score with the help of the coded information below within EMIS. HASBLED MDCalc

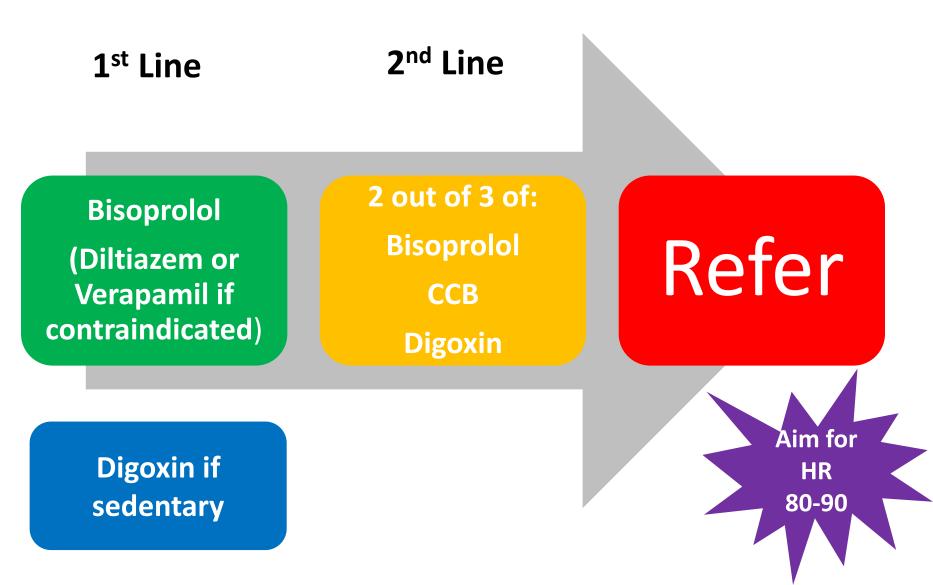
HASBLED score

Award 1 point for each of the following which apply:

1. Uncontrolled Hypertension - latest systolic BP > 160?		
O/E - blood pressure reading / mmHg	07-Feb-2017 99/64 mmHg	*
2. Abnormal Renal Function - Dialysis, Transplant, or Creatinine > 200?		
Serum Creatinine	11-Oct-2016 127 umol/L	*
Renal Transplant or Dialysis?	No previous entry	
3. Abnormal LFTs - Bilirubin > 42 or ALT > 150 ?		
ALT > 150?	11-Oct-2016 18 IU/L	*
Bilirubin > 42 ?	06-May-2015 9 umol/L	*
4. Strake History?		
Is there a history of Stroke?	No previous entry	
5. Prior Major Bleed or Predisposition to bleeding? (ask patient)		
6. Age > 65?		
7. Medication Use Predisposing to Bleeding? (anti-coagulants, anti-platelets, NSAIDs)		
8. Alcohol (> 8 units per week) or Drug use?		
Total the points (1 or 0 per question) from these questions to make the HASBLED score		

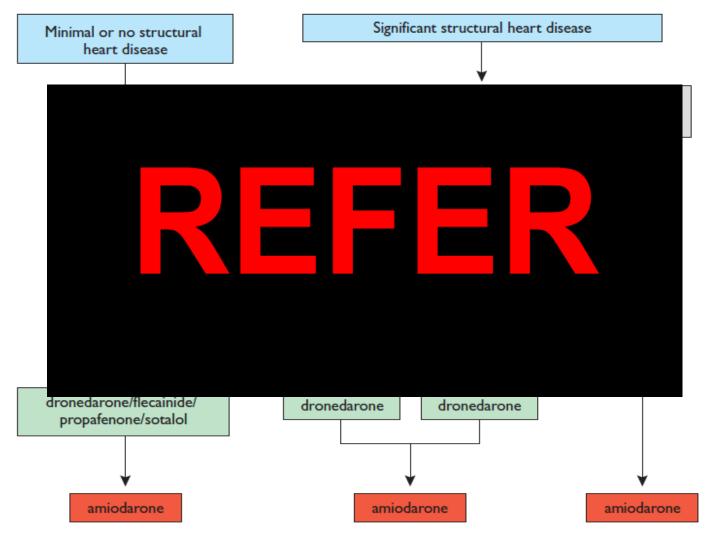


RATE CONTROL





RHYTHM CONTROL



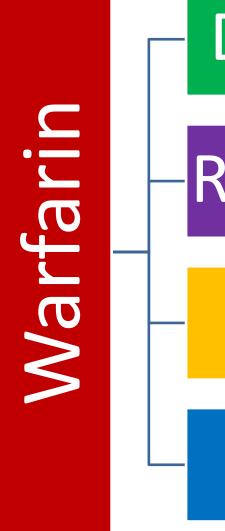
ACEI = angiotensin-converting enzyme inhibitor; ARB = angiotensin-receptor blocker; HHD = hypertensive heart disease; CHD = coronary heart disease; HF = heart failure; LVH = left ventricular hypertrophy, NYHA = New York Heart Association. Antiarrhythmic agents are listed in alphabetical order within each treatment box.



WHICH ANTICOAGULANT?









Apixaban

Edoxaban



PROS AND CONS OF WARFARIN

ADVANTAGES

DISADVANTAGES

- Well established
- Reversible
- GFR < 15
- Significant valve disease
- INR checks compliance
- Long half life means less embolic risk if forget to take
- Once daily

- Frequent blood tests
- Many drug/alcohol /food interactions
- Overall inferior to NOACS
- Higher bleeding risks
- Poor TTR
- Changing dose so not suitable for blister packs

Anticoagulation for atrial fibrillation

This leaflet is designed to help you make a decision about which type of medicine you would prefer to take to help reduce your risk of stroke.

Atrial fibrillation is when your heart has an irregular heart beat and may not pump blood out of your heart and around your body as well as it should. Sometimes it can cause your heart to beat very fast and this can make it pump less well. Often medicines have to be given to slow the heart rate down.

When you have atrial fibrillation your blood is more likely to form clots in the heart. Sometimes a clot can travel to the brain and cause a stroke. A stroke is when one of the blood vessels in the brain gets blocked by a clot and that part of the brain gets damaged. This could lead to a weakness of your arm, leg or face, speech problems or visual problems.

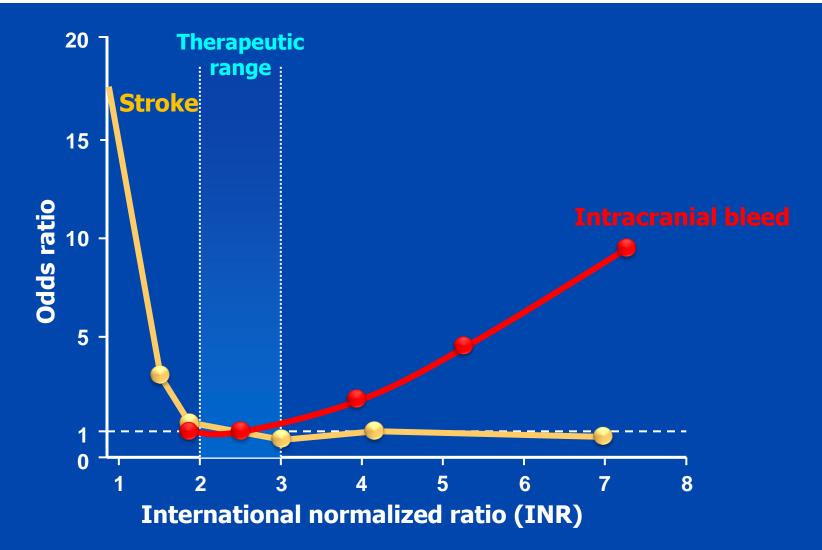
Anticoagulants are medicines which thin the blood and reduce your chance of having a stroke. The downside is that when your blood is thinner, you are more likely to bleed.

You may have heard of a drug called Warfarin which has been around for a long time. This used to be the only anticoagulant available but now there are others available, such as Dabigatran, Rivaroxaban, Apixaban and Edoxaban.

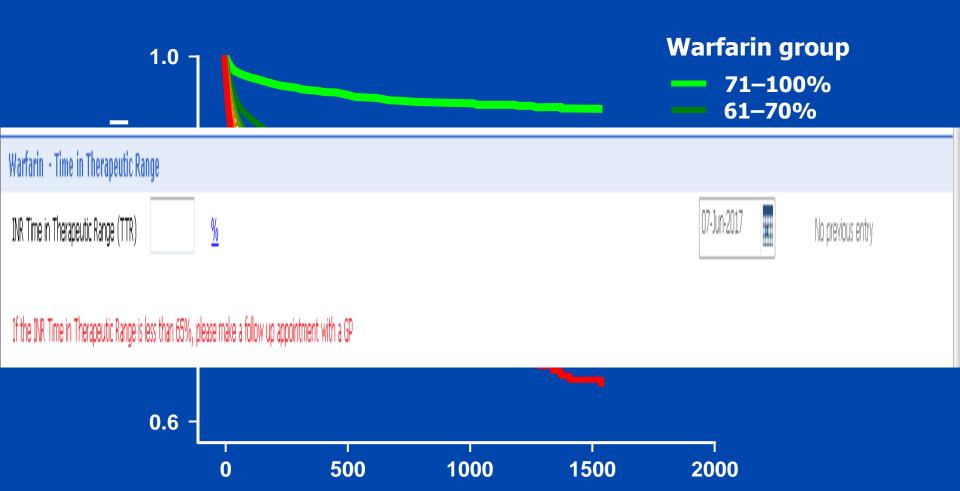
It is very important that you let all health care professionals know you are taking an anticoagulant medicine because it will increase your chances of bleeding.

		-
	Warfarin	Newer anticoagulants (Dabigatran, Rivaroxaban, Apixaban, Edoxaban)
History	A medicine which has been around for a long time for use an anticoagulant	These medicines have been around since 2009 so there is a shorter safety history
	Regular blood tests (INR) are needed to monitor this medicine. In the beginning this may be every few days, but will settle down to once every 4-6 weeks	No blood testing is required for monitoring. You will need an annual blood test to make sure you are on the correct dose
Reversal	There is a specific treatment available to reverse the effects of Warfarin if you are bleeding	Only Dabigatran has a specific treatment to reverse its effects. However, the newer anticoagulants wear off more quickly than Warfarin
	Warfarin is affected by things like food, alcohol and other medications. This means you may need more frequent blood monitoring if you take any new medicines such as antibiotics	These medicines are not significantly affected by food, alcohol or other medicines
	Warfarin stays in the body for a long time so it is less risky if you forget to take a dose. It is also monitored regularly to ensure your blood is thin enough	These medicines stay in the body for a shorter time so it is very important not to miss a dose, as your blood may not be thin enough to prevent a stroke
Frequency	Warfarin is taken once a day but cannot be put into a blister pack or medicines compliance aid	Dabigatran – twice a day, not for a blister pack Rivaroxaban – once a day, can be put in a blister pack Apixaban – twice a day, can be put in a blister pack Edoxaban – once a day, can be put in a blister pack

WARFARIN AND THERAPEUTIC RANGE



WHY IS TTR IMPORTANT?



Survival to stroke (days)

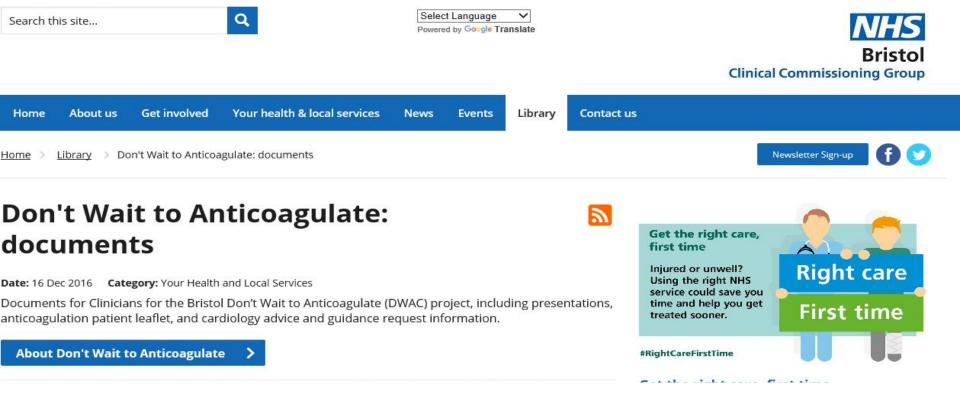
	DABIGATRAN 150/110 mg	RIVAROXABAN 20/15 mg	APIXABAN 5/2.5 mg	EDOXABAN 60/30 mg
STROKE RISK	↓↓ (D150) ↓ (D110)	\checkmark	\checkmark	\checkmark
INTRACRANIAL HAEMORRHAGE	$\checkmark \uparrow$	\checkmark	\checkmark	\checkmark
MAJOR BLEEDING	= (D150) ↓(D110)	=	$\checkmark \uparrow$	\checkmark
GI BLEEDING	1	1	=	个(E60)
DYSPEPSIA	1	-		-

NHS

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Summary of considerations when prescribing Newer Oral Anticoagulants in Non-Valvular Atrial Fibrillation

		-	-	
	DABIGATRAN	RIVAROXABAN	APIXABAN	EDOXABAN
Normal Dosing (if CrCl >50mL/min)	<80 years - 150mg BD >80 years – 110mg BD	20mg OD	5mg BD	60mg OD
For use in a compliance aid	N	Y	Y	Y
Intake with food	N	Y	N	Ν
Lactose/wheat content	No lactose or wheat	Lactose No wheat	Lactose No wheat	No lactose Maize starch
Dose adjustments Always consider other drug-drug or drug-food interactions (these can be found in the document linked below)	In patients taking verapamil reduce dose to 110mg BD See below	See below	If patient has 2 out of 3 of the following characteristics dose is 2.5mg BD: 1. age ≥ 80 years 2. weight ≤ 60kg 3. Serum Cr ≥133 micromoles/L	See below
Weight dose adjustments	If weight < 50kg Consider 110mg BD	Nil	See above	If weight ≤ 60kg Dose is 30mg OD
Renal dose adjustments (if CrCl <50mL/min)	CrCl 30-49mL/min consider 110-150mg BD depending on thromboembolic vs bleeding risk Do not use if CrCl <30mL/min	CrCl 15-49mL/min Dose is 15mg OD with food Do not use if CrCl <15mL/min	CrCl 30-49ml/min No dose adjustment 5mg BD CrCl 15-29mL/min Dose is 2.5mg BD Do not use if CrCl <15mL/min	CrCl 15 – 49mL/min Dose is 30mg OD Do not use if CrCl <15mL/min
Conversion from Warfarin NB – INR values may be falsely elevated after intake of NOAC	Start when INR < 2.0	Start when INR \leq 3.0	Start when INR < 2.0	Start when INR ≤ 2.5



Summary of considerations when prescribing Newer Oral Anticoagulants in Non-Valvular Atrial Fibrillation

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Anticoagulation for Atrial Fibrillation leaflet

This leaflet is designed to help you make a decision about which type of medicine you would prefer to take to help reduce risk of stroke.

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