Atrial fibrillation (non-valvular) and reducing the risk of a stroke Management Options

Brief Decision Aid

Atrial fibrillation (AF) increases your risk of having a stroke (a blood clot in the brain). From your individual risk factors (high blood pressure, heart failure, diabetes, previous stroke and your age), we can estimate the risk of someone like you having a stroke (CHADS2 score).

Your CHADS2 score is

If your CHADS2 score is 0 or 1 we can use a more detailed scoring system (CHA₂DS₂-Vasc) which helps further clarify your risks.

Your CHA₂DS₂-Vasc score is (Note: some clinicians are just using CHA₂DS₂-Vasc)

Using the best available data we can give you an idea of your current risk:

..... in every 1000 people with your risk score, are likely to have a stroke in the next 1 year and people are likely to avoid a stroke in the next 1 year¹

The treatments to help lower the risk of stroke all increase your risk of bleeding (because these treatments all make the blood clot less easily). We can also calculate the risk of bleeding using another formula called HAS-BLED.

Your current HAS-BLED score is This means that in every 1000 people like you might have a major bleed (in the gut or head) in the next year.

There are two options for the management of this risk:

- No new medicine but continuing to reduce your overall risk of cardiovascular disease (a stroke or heart attack) with lifestyle changes such as exercise, weight loss and not smoking.
- **Taking an anticoagulant medication**, which thins the blood and prevents clotting and therefore blockage of arteries. These medicines all reduce your risk of a stroke by about the same amount. There are four different anticoagulant tablets:
 - Warfarin variable dosing dependent on blood monitoring.
 - New oral anticoagulants (NOACs), of which there are now three:
 - Dabigatran 150mg twice daily.
 - Rivaroxaban 20mg once daily.
 - Apixaban 5mg twice daily.

There are some small differences in the effectiveness and product characteristics of the three NOACs but, for simplicity, they have been grouped together in this BDA.

NOTE: in the past taking aspirin once daily was a third option. This DOES help reduce your overall risk of cardiovascular disease (a stroke or heart attack) in some circumstances (if you have already had a heart attack for instance). But if you just have AF and no other risk factors for heart attacks or strokes then the risks of taking aspirin are seen by NICE (the National Institute for Health and Care Excellence) to be greater than the benefits. This option is no longer recommended by NICE.

In making a decision you need to ask yourself "What is important to me?" This leaflet and your health professional can tell you the evidence and give their suggestions but you need to make a decision that is right for you. What are your preferences?

You may want to think about:

- By how much will the treatment reduce the risk of a stroke?
- What about the increased risk of bleeding that comes with anticoagulants? Are there things I do that increase this risk?
- What happens if I need to reverse the effects of the treatment in an emergency?
- Do I need medication that can go in a dosette box to help me remember to take it?
- Will I need regular clinic visits and blood tests?
- How much do I mind if I have to alter my eating and drinking habits?

We have organised this BDA to help you answer two questions - do I want anticoagulation or not? And if I do want anticoagulation then which one is best for me?

Benefits and risks of taking no medicine to prevent stroke

Treatment Option	Benefits	Risks or Consequences
No medicine to prevent stroke	in every 1000 people are not likely to have a stroke in the next 1 year.	people in every 1000 people are still likely to have a stroke in the next 1 year.
	No blood tests or prescription charges and no side effects of medication.	people in every 1000 people are likely to have a severe bleed in the next 1 year.

Benefits and risks of taking any anticoagulant (Warfarin and the NOACs are considered to have same effect on reducing your stroke risk)

Treatment Option	Benefits	Risks or Consequences
Taking any anticoagulant - warfarin or one of the NOACs	 people in every 1000 people like you will not have a stroke in the next 1 year. In other words extra people in every 1000 will avoid a stroke in the next 1 year. 	 people in every 1000 people are still likely to have a stroke in the next 1 year. <u>extra people</u> in every 1000 people like you are likely to have a severe bleed in the next 1 year.

Benefits and risks of Warfarin

Treatment Option	Benefits	Risks or Consequences
Warfarin	The effects of Warfarin can be	You will need to take medication
Warfarin is an 'anticoagulant' - it stops your blood coagulating or clotting.	reversed quickly (20 mins) with an antidote if your blood becomes too thin and you have a bleed or need urgent surgery.	once daily, and the dose may vary. You will need blood tests approximately every 2-6 weeks to make sure your Warfarin dose is
This is taken as a tablet every day. The dose (number and strength) of tablets varies depending on a measure (called INR) of how 'thin' your blood is. This measure is monitored using blood tests done in hospital, community or GP based clinics, or at home. You cannot use a dosette or medication organiser because the dose of warfarin is likely to change quite often.	This is the safest medication if you are waiting for surgery or cardioversion (electric shock to the heart).	 safe. You will bruise/bleed more easily. Side effects: 60 in 1000 will get indigestion/ abdominal pain or discomfort and 5 in 1000 will have to stop because of side effects. You need to avoid drinking more alcohol than recommended and should avoid cranberry or grapefruit juice, garlic supplements and fish oil. You should avoid contact sports such as rugby or some physical jobs where you might be injured easily. You will have to avoid some painkillers and other medications that are available to buy from pharmacies/ supermarkets such as aspirin, ibuprofen or diclofenac. If you get regular courses of antibiotics then you will need more frequent blood tests during and after your antibiotic treatment.

Benefits and risks of the new anticoagulants (NOACs) - Dabigatran, Rivaroxaban or Apixaban			
Treatment Option	Benefits	Risks or Consequences	
These three medications - called NOACs (new oral anticoagulants) vary a little in a number of respects. They have different dosing regimes, and one or two different side effects.	You will not require frequent blood tests but you will need an occasional (usually yearly) blood test for your kidneys and a review of your overall health. You are not limited in the food you can take but there are some medications that may interact. The dose you take will not usually change during treatment.	Severe bleeds occur at similar rates with warfarin, rivaroxaban and dabigatran. All three NOACs lead to fewer bleeds into your brain compared with warfarin. Rivaroxaban and dabigatran cause slightly more bleeds into you stomach than warfarin. Apixaban causes similar bleeds into your gut as warfarin.	

In your local health area one may be preferred or recommended over the others. Rivaroxaban can be		 All three have some common side effects: 10 -100 people in 1000 will develop abdominal pain , bleed into your stomach, nausea, indigestion, blood in urine, diarrhoea, vomiting, nose bleed.
put into dosette and is once daily.		Other side effects: With dabigatran • 20 people in 1000 will have to stop
Dabigatran and apixaban cannot be put in dosette and are twice daily.		dabigatran due to side effects of gastrointestinal pain/ diarrhoea/ vomiting.
If you have kidney problems you may need to take a different dose of NOAC.		 There may be a very small increased risk of heart attack. With rivaroxaban
		 60 in 1000will have some dizziness or swelling of feet/hands.
		 With apixaban Has slightly less indigestion and fewer bleeds into the stomach than dabigatran or rivaroxaban.
		The effects of dabigatran or apixaban cannot be reversed quickly with any antidote but you can use filtration of the blood (haemodialysis) which takes several hours.
		There is a blood product to reverse the effect of rivaroxaban.
		All three drugs leave the body quicker than warfarin so forgetting to take the drug puts you at an increased risk of stroke more quickly than if you were to forget to take warfarin.
		You should avoid contact sports such as rugby or some physical jobs where you might be injured easily.
		You will not have blood results to re- assure you that you are in the correct range in terms of thickness/thinness of your blood.
		You will have to avoid some painkillers and other medications that are available to buy from pharmacies/ supermarkets such as aspirin, ibuprofen or diclofenac.

Brief Decision Aids are designed to help you answer three questions: Do I have options? What are the benefits and risks of these options, (and how likely are they)? How can we make a decision together that is right for me?

Atrial fibrillation – management of risk single BDA with blanks V 2.2 2.10.14 Authors Shirley Simpson Pharmacist Practitioner Dr Dave Tomson, Dr Jane Skinner Prof Richard Thomson Revision date April 2016 Main source: NICE guidance CG180