

Protocol for initiation of anticoagulation in Atrial Fibrillation

Eligibility Patients who are in Atrial Fibrillation

Compared to people in sinus rhythm, those with AF have a five-fold mean increase in risk of stroke, largely due to an increased risk of atrial thrombosis which may embolise to the brain

Very High Risk (12% annual risk of stroke)	High Risk (5-8%)	Moderate Risk (3-5%)
Warfarin is indicated at any age	Warfarin is first-line therapy	Warfarin should be considered
Previous TIA or Stroke	Age >75	Age >65 and no other risk factors
Previous thromboembolism		Age <65 and other risk factors
Hyperthyroidism	Or age >65 and other risk factors	Low Risk (<3%)
Mitral Stenosis	Diabetes	
Congenital Heart Disease	Hypertension	Prescribe Aspirin
Prosthetic heart valve(s)	LV dysfunction or heart failure	Age <65 and no other risk factors

Initial investigations and management:

ECG	Echocardiogram	Coagulation screen	LFTs
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Initiation of Warfarin therapy using "Clever Clogs" decision support software

If the INR entered on the first record is less than 1.95 the initiation protocol is activated.
On diagnosing the need for anticoagulation treatment the Doctor should explain the benefits and possible risks.
The protocol starts with a dose of 2mg a day with the INR being repeated at weekly intervals until it is within the therapeutic range. A change in dose is only recommended after 7 days if the patient shows a high sensitivity to Warfarin. (INR>1.9 after 1 week). On the 14th day of treatment a maintenance dose and interval before repeating the INR is recommended on the basis of the current INR. Further dose changes are recommended until the INR is within range.
In normal operation no change in dose will be recommended within 4 days of a previous change in dose.
When an INR greater than 1.95 is entered in the first record it is assumed that this is an existing patient and it is an existing record that is being entered. Although only one previous record need be entered before the program gives a predicted maintenance dose. It is recommended that, if possible, a number of previous results (say up to 5) be entered. It is therefore helpful if these results can be obtained either from the GP or previous hospital records (eg Aberdeen)

Management of bleeding or excessive anticoagulation (Based on British Society for Haematology guidelines)

INR Result/Bleeding	Recommendations
INR >3.0 < 6.0	Reduce warfarin dose or stop
INR >6.0 <8.0 No bleeding or minor bleeding	1) stop warfarin 2) restart warfarin when INR <5.0
INR >8.0 No bleeding or minor bleeding	1) stop warfarin 2) restart warfarin when INR < 5.0 3) if other risk factors for bleeding give 0.5mg of Phytomenadione i.v. or 5mg orally, repeated after 24hrs if INR still high
Major bleeding	1) stop warfarin 2) give prothrombin complex concentrate 50u/kg or FFP 15ml/kg 3) give 5mg of Phytomenadione intravenously