

ANTICOAGULATION

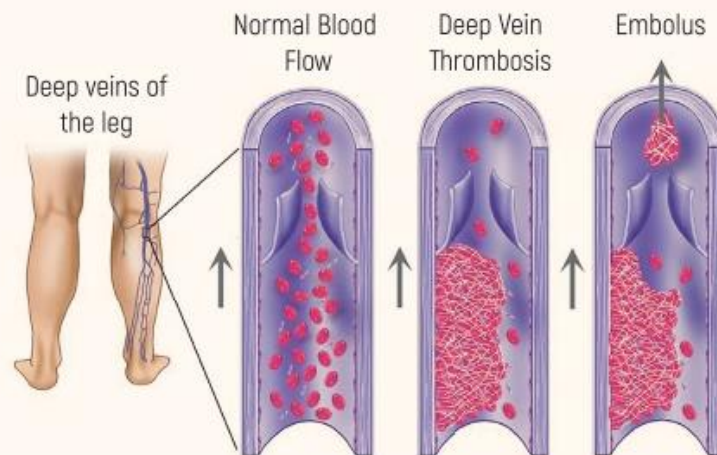
WHAT YOU SHOULD KNOW ?



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Anticoagulation

Thrombosis: It is a process of blood clotting. It is protective if it happens at the site of external injury where it stops further bleeding. However, if the clot develops inside a blood vessel or heart it can impair the blood flow and damage the organ it supplies.



What are anticoagulants?

Anticoagulants are medications used to treat or prevent abnormal and harmful clot formation in the blood vessels or in the cardiac chambers.



Warfarin and Acenocoumarol are common anticoagulants. Among them the most widely used is warfarin. Sometimes doctor will advise you to use injectable medicine like heparin.

Why do you need anticoagulation treatment?

There are many conditions requiring anticoagulation treatment, which include:

- Deep vein thrombosis (DVT- an abnormal clot in a deep vein), most commonly in the legs.

➤ Rheumatic valvular heart disease



➤ Atrial fibrillation (irregular heart beat)

➤ Pulmonary embolism (a blood clot in the blood vessels of the lungs)

➤ Mechanical heart valve

➤ Cerebral Sinus Venous Thrombosis



Anticoagulants are medications given to patients who are at a higher risk of developing stroke due to thrombosis. Action of anticoagulants like warfarin and acenocoumarol can be monitored through PT/INR test (PT stands for Prothrombin Time and INR stands for International Normalised Ratio). The dose of anticoagulant required to maintain the desired level of INR may vary from patient to patient. Your dose will depend on the result of a regular blood test that measures how long it takes for your blood to clot. After every blood test, you need to consult the doctor to determine the dose of anticoagulant required to maintain your INR within a set range. Occasionally, your

dose may need alteration to maintain your INR within the desired range. The doctor will prescribe you what dose you need to take and also advise you when to have a blood test and when it is time to stop taking anticoagulants, if appropriate.

You should be aware of the range of INR value that you need and the dosage you are taking. For that, it is better to keep a planner/diary to chart your dosage and the INR value of each test.

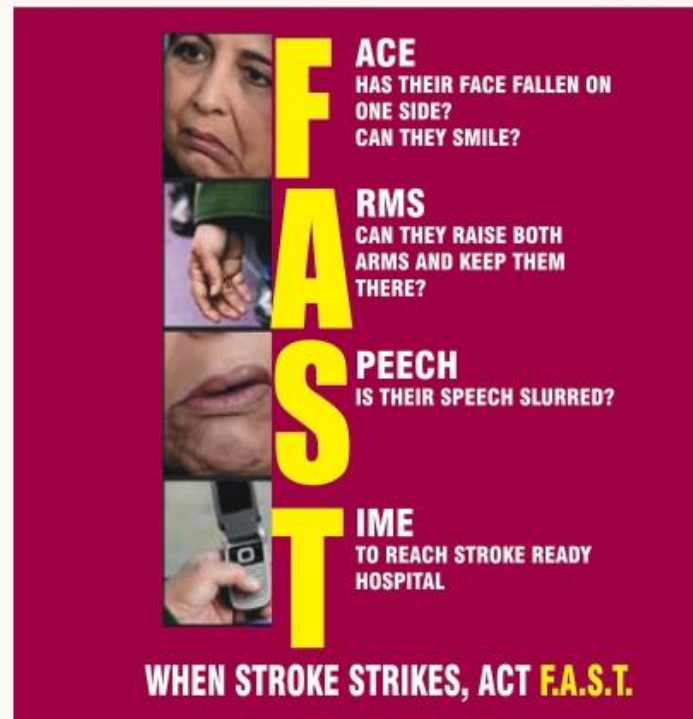
What dose of anticoagulant you should take?

In the case of warfarin or acenocoumarol, you should take the anticoagulant once a day, at roughly the same time according to your doctor's advice. It's important to follow the medication schedule prescribed by your doctor when taking anticoagulants. Try to take light food 2 hours before/after taking the medicine. You need to take the drug at the same time [usually at 5 pm] every day. If you miss a dose and it's already about time for the next dose, do not take the missed dose anymore. Don't double the dose; try to seek advice from your doctor.

What are the risks and side effects of anticoagulants?

While on warfarin or acenocoumarol, it is very important that you have regular PT/INR test to determine the dose of anticoagulant you need. Anticoagulants increase your risk for bleeding. You must seek medical attention and have an urgent blood test if you experience any of the following:

➤ Symptoms of stroke



- Unusual headaches
- Nosebleeds
- Blood in your vomitus or coughing out blood
- Passing blood in the urine or faeces

What things can affect anticoagulation? (with warfarin and Acenocoumarol)

- **Dietary pattern:**

Food rich in vitamin K reduces the effect of anticoagulation. It can reduce INR value as vitamin K helps the blood to clot. Likewise, eating less vitamin K rich food can increase the effect of the medication. The key is to try to eat similar amount of food that contain vitamin K each day.

All green leafy vegetables (eg. Amaranth, drumstick leaves etc.), soya oil, cabbage, asparagus etc. tend to contain higher amount of vitamin K. Food that are comparatively low in vitamin K include milk, coffee, black tea, egg,

curd, beans , carrot, onion, tomato, some fruits, cereals, grains and other milled products. Avoid drinking alcohol while on warfarin.

- **Other medications:**

You should tell your doctor or dentist that you are taking anticoagulants well in advance. It is very important that the doctor or dentist treating you knows that you are on anticoagulant therapy. Many medications change effect of warfarin and reduce/increase INR values. Any other diseases like diarrhoea, which lasts for two to three days also, may affect your level of INR.

Newer anticoagulants

Newer anticoagulants like Dabigatran, Apixaban and Rivaroxaban are available now. While on newer anticoagulant, PT/INR monitoring is not required and it has no interaction with food or drugs. It is more effective with less risk of bleeding. Compared to other anticoagulants these newer anticoagulants are more expensive and have shorter duration of action.

Other information that you must remember while on anticoagulant

- Be careful while using sharp objects like scissors, blades, knives etc.
- Avoid activities or sports that have increased chance of injuries.
- If pregnant or planning to become pregnant, you need to seek advice from doctor because some of the oral anticoagulants are not safe in pregnancy.