

Warfarin Anticoagulant Therapy

Important information
for patients



Your information

Name

Hospital number

NHS number

Date of birth

E-mail

Contact number

Condition requiring anticoagulation

Name of anticoagulant

Target INR / range

Intended duration of treatment

Clinician managing anticoagulation

Date anticoagulation commenced

Contact details for urgent advice

Warfarin Anticoagulant Information Book

This book is intended for people on warfarin or other vitamin K antagonist anticoagulants such as phenindione (Dindevan®) or acenocoumarol (Sinthrome®). This booklet will refer to warfarin, but the information applies equally to the other vitamin K antagonist anticoagulants.

Introduction

Anticoagulants are medicines that prevent harmful blood clots from forming in your blood vessels by making your blood take longer to clot. Some people call anticoagulants blood thinners. The blood is not actually made any thinner - it just takes longer to clot whilst you are taking anticoagulants.

This booklet has been given to you because you are starting to take an anticoagulant medicine. A healthcare professional should go through this booklet with you, explain what it all means and answer any questions you may have.

If this does not happen, please ask.



The healthcare professional will be able to give you advice at the start of your anticoagulant therapy, before you leave hospital, on your first visit to the anticoagulant clinic and at any other time you need it.

There are two main groups of anticoagulants:

1. Vitamin K antagonists (VKA) - usually warfarin
2. Direct inhibitors known as Direct oral anticoagulants (DOACs) or Non-VKA oral anticoagulants (NOACs)

This booklet is for people taking VKA antagonist anticoagulants and provides important information. Warfarin is the most common VKA. There is another booklet for people taking DOAC anticoagulants.

How to use this booklet and Alert Card

Please keep this booklet so you can refer to it.

A yellow 'Anticoagulant Alert Card' is also provided, which you should fill in and always carry with you. This identifies that you take anticoagulant medication, which may be important in an emergency and to inform healthcare professionals before you receive other treatment.

If you are taking warfarin your anticoagulant clinic will also issue you with a dose record book that will indicate your latest blood test result, dosage of anticoagulant and date of your next blood test.

Depending on the system used by your anticoagulant clinic your blood test results may be recorded on a separate sheet or a booklet and form an on-going record of your treatment. You should keep your treatment records from the last six months.

You may need to show your latest treatment record when requesting and collecting a

repeat prescription for your anticoagulant therapy.

Vitamin K antagonist anticoagulants

These include the anticoagulants warfarin, phenindione (Dindevan®) and acenocoumarol (Sinthrome®). Vitamin K antagonist (VKA) anticoagulants work by inhibiting vitamin K in your body. Your liver uses vitamin K to make substances called clotting factors that are used in blood clotting. Inhibition of vitamin K results in your blood taking longer to clot. This protects you against blood clots. These anticoagulants need regular blood monitoring to check how quickly your blood is clotting. It takes about five days for warfarin to start working fully.

Why do I need to take a warfarin?

Warfarin is used:

- To reduce the risk of getting a blood clot. Examples of situations when this risk is increased are:
 - you have a condition such as Atrial Fibrillation which increases your risk of having a stroke,

- you have a blood clotting disorder (which may be genetic)
- you have a replacement heart valve
- To treat blood clots, such as deep vein thrombosis, where warfarin is used to stop the blood clot getting larger or breaking off and travelling to the lungs (pulmonary embolism).

Your healthcare professional will be able to explain why *you* need to take warfarin.

How long do I need to take warfarin for?

How long you need to take warfarin for will depend on the reason you are taking it. Some people will need to take warfarin for the rest of their lives, others may only need to take warfarin for a few months. If you are taking warfarin indefinitely (long-term) you should have an annual review with your healthcare professional to discuss the benefits and risks of your medication. You should not stop taking warfarin without discussing it with your healthcare professional first.

How do I take warfarin?

Take your full dose of warfarin once a day, at

about the same time with a glass of water.

If you forget to take your dose at your usual time, take it when you remember at any time on that day. If it is the next day when you remember that you forgot to take yesterday's dose, you should contact your clinic for advice. If you forget to take your warfarin for two or more days in a row, **DO NOT** take all the missed doses. Call your clinic for instructions.

If you take the wrong dose by mistake, make a note on your treatment record including the date that it happened. Take your normal dose at the next due time. If the dose you took in error is much larger than your normal dose, please contact your anticoagulant clinic.

If you have trouble remembering to take your medicine speak to your healthcare professional about the many aids that you can use to help you remember.

You may be given several different strength tablets to make up your dose of warfarin and it is important that you become familiar with

the different strengths in milligrams (mg) as well as the different colours that you need to take.

In the UK, the colours of warfarin tablets are:

500 micrograms	(White)	
1mg	(Brown)	
3mg	(Blue)	
5 mg	(Pink)	

Different brands of warfarin tablets may have different markings to those shown above.

Other vitamin K antagonist anticoagulants may come in different strengths and colours.

You may need a mixture of different strength tablets (different colours) to make up your dose. Your healthcare professional will explain this to you.

Do not confuse the dose in mg with the number of tablets that you take.

Monitoring required while you are taking warfarin

You must have a regular blood test called an INR test. INR stands for International Normalised Ratio. This is a test that measures how long your blood takes to clot. Normally, blood that is not anticoagulated has an INR of approximately 1.0. For people taking warfarin their INR will be higher, for example 2.5. The higher the number the longer it takes for your blood to clot.

Your healthcare professional will advise you of the INR range or target for your condition and it should be written on your treatment record.

The dose of warfarin that you need to take will depend on your INR test result and your target INR or range. If your result is out of the range appropriate for your condition, your dose of warfarin will be increased or decreased accordingly. The dose of warfarin required to achieve the target INR varies for each person.

How often you will have to have your blood

tested will depend on whether your INR is in range and stable or whether it is out of range. Stability is indicated by a measurement called the Time-in-Therapeutic Range (TTR). It is important to keep your blood test appointments to ensure that the dose of warfarin you are on is still safe.



The anticoagulant services in your area

Anticoagulant services differ around the UK and they use different forms of paperwork. Your healthcare professional will advise you of the service in your area and how it works.

Your anticoagulant clinic or your GP will arrange your blood tests for you. The blood test may be a standard (venous) blood test or by finger-prick.

It is important that you tell your anticoagulant clinic about any medicines that you have

started or discontinued since your last appointment.

Patient self-monitoring

INR monitoring is necessary for patients on warfarin treatment and patients can attend anticoagulation clinics for their regular blood tests and dosing advice.

There is a handheld point of care testing device available which involves placing a finger prick of blood onto a testing strip which is placed into the device and gives a reading. Self-testing refers to the user doing the INR test themselves and then contacting their healthcare professional with the reading for advice on any change to the dosage of the anticoagulant that may be needed. The results of the tests and warfarin dose need to be recorded in the patient's treatment record provided by the clinic.

Self-managing refers to the user doing the INR test themselves and then self-adjusting the dosage of their anticoagulant medication by following an agreed care protocol. Together, these methods of care are referred

to as self-monitoring.

To consider self-monitoring, the patient needs to discuss the process with their GP, anticoagulation clinic or managing healthcare professional. Guidance can be provided regarding the purchase of a testing device which may have to be bought by the patient.

The patient/carer will need to undertake training to ensure that they are confident in being able to undertake self-monitoring.

The GP or healthcare professional will be responsible for prescribing the testing strips, advising on how often to test, and providing quality control checks to ensure that the device is working properly. The patient should make sure they comply with the quality control advice provided. It is the patient's or their carer's responsibility to record in the treatment record the INR result, warfarin dose and date of next test.

Repeat prescriptions

It is important that checks are performed each time you request and receive a supply of

warfarin. This must include reviewing your blood test results and dose information and ensuring that it is safe to supply you with more tablets.

When you request a repeat prescription, you may be asked to provide information about your INR test results and current dose of warfarin, which should be in your treatment record.

Your community pharmacist may also ask to see this information when they dispense your prescription.

If you cannot request or collect the prescription yourself, make sure that the person doing so on your behalf has this information with them.

For prescription delivery services, the pharmacist dispensing the prescription should contact you to confirm your INR and current dose.

Make sure that you do not run out of tablets and always have at least a week's supply. If you are going on holiday it is important to make sure that you have enough supplies of

your medicines for the duration of your holiday and speak to your health care professional regarding the timing of your anticoagulant medicine if you are travelling across time zones.

Serious side effects

All medicines have the potential to cause side effects for some people. You should read the patient information leaflet that you will find in the box of your medicines. The most serious side effect of anticoagulants is bleeding.

If you experience any of the following, seek medical attention as you may need an urgent INR test:

- prolonged nosebleeds (lasting more than 30 minutes)
- blood in vomit (may look like ground coffee)
- blood in sputum or phlegm (may look like ground coffee)
- passing blood in your urine or faeces (poo)
- passing black faeces (poo)

- severe bruising without injury or out of keeping with the extent of the injury
- unusual headaches
- for women, heavy or increased bleeding during your period or any other vaginal bleeding.

Some patients will notice that they bruise more easily than before. If you cut yourself, apply firm pressure to the site for at least five minutes using a clean, dry dressing.

Seek immediate medical attention if you:

- are involved in major trauma
- suffer a significant blow to the head
- are unable to stop any bleeding.

Periods

Women may experience heavier periods while they are taking oral anticoagulants and may wish to discuss this with their GP, anticoagulant nurse, or pharmacist.

Pregnancy and breast feeding

Oral anticoagulants can seriously affect the development of a baby in early pregnancy.

Women who are on oral anticoagulants should discuss plans for future pregnancy with their doctor before trying to conceive wherever possible.

Women who think they have become pregnant while on an oral anticoagulant should take a pregnancy test as soon as possible and, if this is positive, make an urgent appointment with a doctor. You may breast feed while taking warfarin.

Going to the dentist

You can still go to your dentist as usual, but you should tell your dentist that you are taking warfarin before receiving any treatment including any medication prescribed by the dentist such as antibiotics.



In most cases your dental treatment can go ahead as normal without your warfarin being stopped or the dose being adjusted.

However, your dentist will need to see a recent INR test result to ensure that it is safe to provide dental treatment. You should contact your dentist before your appointment in case they need you to have an extra blood test for your INR.

It is important to keep good oral hygiene to reduce gum disease that may lead to bleeding and the need for dental treatment.

Having surgery or a procedure

Before going for any surgery make sure that your healthcare professionals know that you are taking warfarin. Prior to your surgery you will be advised of any steps that need to be taken to reduce your risk of bleeding or having a blood clot before and after the procedure.

You may be asked to stop taking warfarin and use an anticoagulant injection instead before surgery. If you are unsure of anything speak with your anticoagulant clinic and the surgical team before going for surgery.

Physical activity

People taking warfarin can usually continue their physical activities and start new physical activities. However, it is advisable to avoid contact sports and other activities in which injuries are common.

Do not stop taking this medication without first talking to your doctor.

Things that can affect INR control

Other medicines

Many medicines can interact with warfarin either increasing or reducing its effect. You should advise your anticoagulant clinic of any changes to your medicines. Before taking any herbal remedies, alternative treatments or medicines bought over the counter, you should discuss whether there might be an effect on your warfarin with a pharmacist or your anticoagulant clinic.

Remember to advise other healthcare professionals that you are taking warfarin so that they can check whether any new medicine they prescribe might interfere with

your warfarin. If you are planning to buy over the counter medicines, including alternative remedies, tell the pharmacist that you are taking a DOAC and show them your anti-coagulant alert card. They can then advise you on the medicines that are safe to take.

If starting or stopping another medication while taking warfarin, you may be asked to have an INR blood test within five to seven days of starting the new medication. This is to make sure that your INR remains within the desired range. Please contact your anticoagulant clinic for further advice.

You should not take aspirin unless it has been specifically prescribed by your GP or hospital prescriber. It is also advisable to avoid other aspirin-like medicines (known as non-steroidal anti-inflammatory drugs, like diclofenac or ibuprofen). Please note that some of these can be bought over the counter in pharmacies with names such as Nurofen®.

Paracetamol and codeine-based painkillers are generally acceptable, although be aware

that some paracetamol 'plus' products contain aspirin.

Keep to the recommended dose of your warfarin, and other medicines you are taking.

If you are unwell

Sometimes falling ill can affect your INR. If you fall ill notify your anticoagulant clinic as soon as you are able, this is particularly important if you have diarrhoea, vomiting or you are unable to eat as normal. You may need to have an INR blood test sooner than was previously scheduled.

Diet

It is important to eat a well-balanced diet.

Consult your doctor or other healthcare professional if you need to diet to lose weight.

Any major changes in your diet may affect how your body responds to your warfarin. You should not make dietary changes when starting on warfarin unless advised to do so by your anticoagulant clinic. If you are making changes to your diet you may need more frequent INR tests and your warfarin dose

may need to be adjusted accordingly to accommodate your diet.

Be aware that changing the amount of vitamin K in your diet may affect your INR result. You do not need to avoid foods rich in vitamin K as these foods are nutritious and may help keep your warfarin control stable. Examples of foods rich in vitamin K include green leafy vegetables, chickpeas, liver, egg yolks, cereals containing wheat bran and oats, mature cheese, blue cheese, avocado and olive oil.

Please note that changes in the amount of vitamin K in your diet can lead to fluctuations in your INR result – eating much more than usual may lower your INR and eating much less than usual may raise your INR. So, you should take similar amounts of vitamin K containing foods on a regular basis. It is also advisable to keep to similar amounts of cranberry juice and grapefruit juice on a regular basis if you drink these.

If your diet changes greatly over a seven-day period, you should have an INR test.

Alcohol

It is recommended that you do not exceed the national guidelines. These are up to 14 units a week for men and women spread over the week rather than drinking all 14 units in one or two days. One pint of beer is two units; one pub measure of a spirit (25ml) is one unit, and one pub measure of wine (125ml) is one unit. This can also vary depending on the strength of alcohol.

It is dangerous to 'binge drink' while taking anticoagulants.

Carrying a medical identification card

It is always advisable to carry some sort of identification, so that in the event of you being unable to, it will let others know that you are taking an anticoagulant. The manufacturer of the drug may provide an alert card. There are also a variety of items available to buy that tell people that you are taking an anticoagulant including: credit card size alert cards and medical information bracelets and necklaces.

Further information

There are a range of patient organisations that can give you further information and support. Their contact details are available from your anticoagulant clinic. In addition, below are links to some of their websites:

- Atrial Fibrillation Association (AFA)
<http://www.hearhythmalliance.org/afa/uk>
- British Heart Foundation
www.bhf.org.uk
- NHS
www.nhs.uk
- Stroke Association
<https://www.stroke.org.uk/>
- Thrombosis UK
<https://www.thrombosisuk.org/>

DRAFT

**Developed with support from British Society for Haematology and
NHS England and NHS Improvement**