# WARFARIN MANAGEMENT GUIDE FOR RHEUMATIC HEART DISEASE

Health New Zealand

## WHY DO YOU NEED WARFARIN?

You have had a new valve (or two) put in your heart to replace the one(s) damaged by rheumatic fever. Your new mechanical heart valve helps your heart work better. That's great news. However, the new valve(s) makes it more likely your blood will form a clot.

Blood clots can travel from your heart to other parts of your body through your blood vessels.

If this happens it can stop the flow of blood to important places like your brain or heart. Blood carries oxygen to these organs. If the blood supply is cut off by a clot, the cells that make up these organs can die leading to a stroke or a heart attack. This could make you extremely sick and could leave you disabled, or you could die. Warfarin is a medicine a doctor or pharmacist prescribes for you that helps prevent blood clots from forming in your body.

In New Zealand, Warfarin comes in two different brands of tablets. The two brands are not exactly the same, so it is important that you keep taking the same brand:

- » In New Zealand, the brand of Warfarin called Marevan<sup>®</sup> is usually used
- The other brand is called Coumadin<sup>®</sup>, which cannot be used at the same time as Marevan

There are also different strength tablets. It is important that you only take the medicine that has been prescribed for you.



## How to Take Warfarin

Warfarin helps prevent blood clots forming in your body. Your doctor/ pharmacist or other health professional will tell you how much Warfarin you need to take. It is important you follow these instructions.

#### » Daily Dosage:

- It is important to take your Warfarin tablet every day
- Preference to take it at the same time in the evening eg at dinner time. (Can be taken before, during or after your meal)
- We usually advise taking Warfarin in the evening because INR blood tests are usually done in the morning
- » Reminders: Use a calendar or reminder system on your phone to mark off when you have taken your daily dose
- » Early or Late doses:
  - If you forget to take your
    Warfarin tablet at your normal time, this is fine. You can still take your Warfarin tablet for that particular day
  - For example: you normally take it at 6pm every day. However, at 9pm you have just realised that

you have forgotten to take your Warfarin. You can still safely take your Warfarin

• Same applies if you have taken your Warfarin early. A few hours before or after will not cause any harm

#### Missed Dose:

- If you have completely forgotten to take your Warfarin tablet for the day, and only realised the next day, then take your normal Warfarin dose and contact your doctor/nurse/specialist immediately
- DO NOT DOUBLE DOSE i.e., take two Warfarin tablets in one day. This will have the opposite effect and can be harmful. Your doctor/nurse/specialist can advise you in these instances
- If you miss two or more doses, you should notify your doctor/ nurse/health professional as soon as you can

Doctor/nurse/specialist contact number

## **Monitoring and Blood Tests**

Your doctor/health professional needs a reliable way to monitor what's going on in your blood, so that they can prescribe a safe Warfarin dosage for you. This is done by a blood test.

There are a number of ways that your INR can be monitored. It is important you understand how this is going to happen for you. If you are unclear ask your health professional to explain this to you.

#### Home

Some people prefer to check their blood at home using a portable machine. You will have to pay for the INR test strips, but you may find finger prick testing easier, especially if you find it difficult to have your blood tested at a laboratory.

#### Pharmacy

You may also be able to have your INR monitored at a pharmacy once your INR is stable using finger prick testing. Your doctor/nurse can provide more information about this. INR Testing: Regular blood tests are needed to measure your INR (International Normalized Ratio), which shows how long your blood takes to clot. You should have been told what INR number is right for you. If not ask your doctor/ health professional managing your Warfarin.

How often: In the beginning, daily tests are needed until your INR is stable. This is usually for 1-2 weeks. Later, tests may be needed every two weeks to monthly or as often as your doctor/health professional advises you.

» Adjustments of your Warfarin dose: Your doctor/pharmacist/ nurse will tell you what dose of Warfarin to take based on your INR results. Any changes to Warfarin dose will take 2 to 4 days to change your INR.

## Side effects and things to watch out for

The main side effects to watch out for are increased bleeding and bruising. This happens because Warfarin slows down the blood's clotting system. When your INR is at the correct level, the risk of side effects is low.

- » Bleeding: Warfarin can cause more bleeding and bruising than normal. See your doctor immediately, or go to an emergency department, if:
  - You have a serious fall or hit to the head
  - You have any serious symptoms like coughing up blood or vomiting blood
  - There is blood in your urine or bowel motions/stool
  - You have bleeding that won't stop after 10 minutes of applying pressure

For women, if you notice heavier bleeding during your period than before starting Warfarin, continue your Warfarin and see your doctor as there are ways to manage heavy periods.

» Early signs that your Warfarin dose may need changing: Watch for early signs of bleeding, such as unexpected bruises, bleeding gums or nosebleeds, and let your doctor/health professional know.



If your INR is too low it might not be preventing clots so go to your emergency department immediately if:

- You have difficulty breathing
- You have pain in your chest
- You have pain
- You have swelling in your legs
- You have symptoms of a stroke (face drooping, arm weakness, speech difficulty, confusion, trouble seeing, trouble walking). Family should be aware of symptoms of a stroke so they can get help immediately
- Injuries: Avoid activities that might cause injuries and see your doctor at once if you have any signs of serious bleeding, such as coughing or vomiting blood, nose bleeds that don't stop after a few minutes, blood in urine or stools, severe headache, dizziness or weakness.
- » Monthly Bicillin IM injections: The nurse giving your IM injection should check your latest INR result before giving your antibiotic. In most cases it will be safe to give your IM injection but there is a chance you may get a bruise following this.
- Other side effects: Very occasionally Warfarin can cause vomiting, nausea, diarrhoea, rash, alopecia (hair falling out). If you experience any of these things discuss them with your doctor/ health professional.

## **Diet and Lifestyle**

Having blood tests often is needed because many things, such as what you eat, other medications, vitamins, supplements, and illness, can affect your INR.

To keep your INR stable, try to eat a balanced diet, and let your doctor know of any changes (such as loss of weight, eating more healthily, or starting to take vitamins or supplements) as these can affect your INR.

» Vitamin K: Vitamin K can lower the effect of Warfarin. Some foods have a lot of Vitamin K in them (e.g., broccoli, spinach, watercress, silver beet, chickpeas, green leafy vegetables, brussel sprouts, dark green lettuce, turnip greens, soybeans, liver).

It is best to keep the amount of these you eat the same each day to keep your INR stable. Other foods can increase the effect of Warfarin, such as garlic.

- » Alcohol: Too much alcohol can mean you have a higher chance of severe bleeding even while your INR is still in the target range. Do not drink more than 1-2 standard alcohol drinks per day. One standard drink is 300ml regular beer, 100ml wine, 30ml spirits (whisky, gin, vodka).
- Other drinks and herbal supplements to avoid if you are taking Warfarin include:

- herbal teas (chamomile, kawakawa)
- drinks (kava, noni juice, cranberry juice)
- herbal supplements (ginko biloba, garlic, ginseng, St. John's Wort, ginger, fenugreek, papaya, dong quai, red clover, feverfew, echinacea purpurea)
- any supplements containing vitamin K or products with sources of vitamin K (alfalfa tablets, Anlene<sup>®</sup> dairy products)
- dietary supplements which have large amounts of vitamin E and omega 3 fatty acids, Co-Enzyme Q10
- » Other Medications: Inform your doctor/pharmacist/health professional about all other medications, supplements, or herbal remedies you take, as they can affect Warfarin. Remind them you are on Warfarin if you need new medicines.

Note that anti-inflammatory medications like Ibuprofen (Brufen), Nurofen and Diclofenac (Voltaren) should not be taken while on Warfarin.

### **Travel and Daily Activities**

While you are on Warfarin, take extra care to avoid doing things that could cause bruising or bleeding such as deep massage.

» Travel: You can travel with Warfarin but let your doctor know your travel plans if you are going to be away during the period you are due a test to monitor your INR, as you may need a blood test before you leave or while you are away.

Carry your Warfarin in your carry-on luggage. Your doctor can provide you with a letter stating that you are travelling with essential medications for your own use.

Moving permanently: You should tell your family doctor, and your heart specialist if you are planning to move away permanently, or for longer than three months. They can help by referring you to the medical team in your new area, and/or provide you with a letter and your important medical records to take with you.

- Physical Activity: Avoid contact sports (like rugby or boxing) or activities with a high risk of falling or bumpy rides such as theme park rides. If you are not sure, just check with your doctor or nurse.
- » Tattooing: There is a risk of bruising and bleeding as a result of tattooing and generally it is not recommended but consult with your GP for further advice.

If you are going to have a traditional tattoo, talk to your doctor about how your Warfarin can be managed around the tattooing.

## VERY IMPORTANT THINGS TO REMEMBER

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Pregnancy: If you are wanting to consider pregnancy, your doctor or nurse can arrange for you to talk with a specialist or heart doctor who looks after women with heart disease in pregnancy. This can be arranged at any time, even if you are not planning a pregnancy immediately.

To avoid an unplanned pregnancy, you should use some form of contraception until you are ready for pregnancy. Discuss with your nurse or doctor what is best for you. If planning a pregnancy, you may need to change your medications before you become pregnant. Warfarin can harm a baby's development in early pregnancy, and there are other medications that can be used which will reduce the chance of clots and are safer for baby.

If you find out you are pregnant, please talk to your doctor as soon as you can so that your medications can be changed if required. Do not just stop taking your Warfarin. Your doctor will discuss the best options for blood thinners with a specialist obstetrician and your heart specialist.

Keep your doctor/pharmacist/ nurse up to date: Let your health professional know if you have missed or taken extra doses of Warfarin, if you have made any changes to what you eat or other lifestyle changes. Also, let your doctor/nurse/ pharmacist know if you are taking any herbal remedies, kawakawa tea, or vitamin supplements, medications, and painkillers.

It's important to be honest because if your INR is low due to missed doses the health professional is unaware of, they may increase the dose which leads to a high INR and increase risk of bleeding.

- Informing Your Dentist: Tell your dentist you are taking Warfarin. Consider using a soft toothbrush if your gums bleed easily.
- Medical Procedures: If you need to have even small medical procedures, you should always let the person doing it know that you are on Warfarin.

- Emergencies: Consider getting a MedicAlert bracelet or necklace in the event that you are unable to inform someone that you are taking Warfarin (eg. in a car accident).
- » Overdose: If you ever suspect that you or someone else has swallowed too many Warfarin tablets, call your National Poisons Centre for advice. In New Zealand, that's 0800 POISON or 0800 764 766.

By following these guidelines and regularly consulting with your healthcare provider, you can manage your Warfarin therapy effectively and reduce the risk of complications.

» Warfarin Book: Keep your Warfarin record updated and bring it to all medical appointments.

Doctor/nurse/specialist contact number



Health New Zealand Te Whatu Ora