

## **PHARMACY**

**Drug Information** 

# Warfarin



#### What is Warfarin?

- Warfarin (an anticoagulant or blood thinner) blocks the action of Vitamin K in liver, which is necessary to form blood clot.
- It prevents harmful blood clots from forming in your heart and blood vessels and lodging in the brain, lungs or legs.
- It does not dissolve existing clots, but prevents clots from becoming larger.
- It reduces the risk of harmful clotting events e.g. strokes or heart attacks.
- It is usually prescribed to patients with high clotting risk (e.g. irregular heartbeat, artificial heart valves, Antiphospholipid Syndrome).
- The duration of treatment may vary from three months to long term.
- Warfarin brand:
  - o The brand available in our hospital is Marevan®. There are 3 colours and strengths: 5mg (pink), 3mg (blue), 1mg (brown).
- Do not change the brand or dose of warfarin on your own.

#### How is Warfarin Administered or Taken?

- Take warfarin orally, once a day, preferably at a regular time, with or without food.
- If you miss a dose,
  - o Take the missed dose as soon as you remember.
  - Skip the dose for the day if you miss your dose for more than 8 hours from your usual dosing time; continue your usual regimen the next day.
  - o Do not double your dose as this may increase the risk of bleeding.
  - Record all missed doses and inform your doctor or pharmacist at the next appointment.

#### How is Warfarin Monitored?

- Warfarin dose varies among individuals and the dose you require depends on a blood test known as International Normalized Ratio (INR).
- International Normalized Ratio (INR):
  - o Measures how long your blood takes to clot.
  - o Your doctor will set a target for you.
  - o INR below target blood may be thicker than desired, more prone to clot
  - INR above target blood may be thinner than desired, more prone to bleed
  - You need closer monitoring of your blood test if you are newly started on warfarin or had a recent change in your warfarin dosage.

#### Can Warfarin be Taken With Other Medications?

- Many medications can affect the way warfarin works in your body.
- Do not take traditional remedies (e.g. cordyceps, St John's Wort, "Jamu") as they may cause drastic and unpredictable effects with warfarin.
- Changes in your other medications may warrant more frequent INR monitoring.
- Consult your doctor or pharmacist before you start, stop or change the dose of your medications.
- Examples of medications that may affect warfarin:
  - Prescription medications for thyroid, cholesterol, fits, stomach ulcers; antibiotics, other blood thinners
  - Over-the-counter medications or painkillers
  - o Nutritional supplements such as multivitamins, omega-3-fish oil

### What Diet Modifications are Needed?

- The effect of warfarin depends on the amount of Vitamin K in your body which is contributed mainly from your diet.
  - o Increase in Vitamin K intake reduces the effect of warfarin and vice versa.
- Maintain a consistent diet to ensure consistency in Vitamin K intake.

Some examples of food rich in Vitamin K:

Broccoli Brussel sprouts Cabbage Canola oil Cauliflower	Chick peas Chinese Kai Lan Cod liver oil Egg yolk Green tea	Lentils Lettuce Liver Seaweed	Soybeans Soybean products Spinach Turnip greens	
It is not necessary to avoid those foods entirely as many of them are				

It is not necessary to avoid these foods entirely as many of them are good for health.

- Inform your doctor or pharmacist if you intend to make drastic dietary changes.
- Check with your doctor if you are unable to eat for several days, have continuous stomach upset or diarrhea as this may reduce the amount of Vitamin K in your body.
- Avoid ALL herbs (e.g. ginseng soup, herbal "Bak Kut Teh", herbal jelly).
- You may have moderate amount of alcohol (e.g. 1 to 2 glasses of beer or a glass of wine occasionally). Avoid excessive alcohol intake and strong alcoholic drinks (e.g. whisky, brandy).

## Are There any Special Precautions That I Need to Take?

- Avoid any sports or activities that may cause injuries.
- See a doctor if you have a fall, sustain injury to your head or other parts of your body as serious internal bleeding may occur.
- Inform all doctors, dentists or pharmacists that you are on warfarin.
  - Avoid performing surgical procedures (e.g. endoscopy, certain dental treatment) without reversing the effect of warfarin.
- Inform your doctor or pharmacist of the medications you collect from other clinics or hospitals.
- Discuss with doctor or pharmacist if you intend to:
  - Undergo acupuncture or massage as they may result in bruising or bleeding
  - o Conceive as warfarin may cause birth defects
- Carry your anticoagulation record booklet or other identification stating that you are on warfarin to ensure you receive appropriate treatment if you are involved in an accident and taken to hospital.

## What are the Important Side Effects of Warfarin?

Side Effects	Management		
Obvious bleeding	See a doctor if bleeding does not stop within minutes or if you feel unwell		
Bleeding gums when brushing teeth			
Unexplained nose bleed	<ul> <li>Use soft toothbrush and floss gently</li> </ul>		
Prolonged bleed from injury	Use electric shaver instead of a blade		
Unexpected or unusual vaginal bleed	For women, increased menstrual flow is common but check with your doctor if you feel unwell		
Internal bleeding	See a doctor immediately or		
Black, sticky, or bloody stools	Admit yourself to the Accident and Emergency department		
Coughing up blood or coffee ground- like material			
Unexplained bruises or purplish areas on skin			
Blood in urine			
Severe, continuous headache			
Sudden giddiness or acute confusion			
Sudden abdominal pain			
Sudden backache or joint pain			
Shortness of breath			

Blood clots may still form while on warfarin therapy. The sign and symptoms depend on the site where it is found.

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Site of Blood Clot	Signs and Symptoms	Management
Leg or deep vein thrombosis	Swelling, redness, pain, warmth, numbness	See a doctor immediately or
Lung or pulmonary embolism	Chest pain, breathlessness, coughing up blood	Admit yourself to the Accident and Emergency
Brain or stroke	Muscle weakness, slurred speech, blackouts, giddiness, visual disturbances	department
Heart or heart attack	Chest pain, shortness of breath, palpitations	

Monitor for bleed even after stopping warfarin as effect of warfarin may take some time to wear off.

## How do I Store Warfarin?

• Store your medication in a cool, dry place away from heat, moisture and direct sunlight.

If you develop rashes, facial swelling or shortness of breath after taking the medication, you could be allergic to the medication. Please seek medical attention immediately.

If you have any problem with your treatment, please contact your doctor, pharmacist or nurse clinician.

Keep all medications out of reach of children.



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