September 1, 1997

WHAT YOU SHOULD KNOW ABOUT DEEP VEIN THROMBOSIS (DVT)

Participants in the Hormone Program of the Women's Health Initiative will be helping us to get answers to questions about heart disease, cancer, and fractures. We have developed this fact sheet to give you some information about deep vein thrombosis or blood clots. A small number of women (and men, for that matter) can develop these types of blood clots in the veins of their legs or lungs. A few recently published studies have reported that hormone replacement therapy (HRT) may increase this risk a little, but the risk is still very low. We hope this information helps you to reduce your risk of developing deep vein thrombosis.

What is DVT?

Deep vein thrombosis or DVT is not common. It occurs when a blood clot forms in the large blood vessels of the legs (this is *not* the same as varicose veins). A small DVT usually does not cause problems. A large clot in the deep veins of the legs can cause problems because it can block blood flow. The most serious problem with DVT is that the clot can break loose, travel up to the lungs, and affect the lungs and heart. Usually, even a large clot will dissolve if treated early, and there will be little or no long-term health problems. Problems with DVT are far less common than heart attacks or strokes.

What causes blood clots?

Blood clotting is a normal reaction of the body. Blood clots often form because of an injury to your blood vessels (for example, a cut). Blood clots may also be caused by changes in your blood circulation. Blood circulation in your legs slows when you spend a long time in bed or are seated for many hours without moving, such as during a long plane flight or car trip.

Changes in blood clotting can also happen after a hip fracture or major operation; or when you have a severe illness, such as a heart attack, stroke, or some cancers. If you have had a blood clot in the past, you may have a higher risk of having one again. In a small number of people there is a family tendency to have more blood clots.

How will I know if I develop DVT?

Most of the time blood clots cause no problems. If the clot is small, you may not ever know you had it. Larger clots that form in the leg can cause swelling or pain of the affected leg. If both legs are swollen, it is probably *not* because of DVT, but you should see your doctor.

Rarely, a large clot in the leg can travel to the lung and cause a sudden shortness of breath or painful breathing. This condition is called a pulmonary embolism. Usually swelling and pain in the leg happens before shortness of breath and pain in the chest. Almost all the clots in lungs come from clots in the deep veins of the leg.

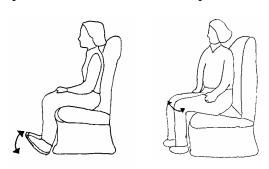
What is the role of hormones?

Studies published recently report that women taking hormone replacement therapy (HRT) can have an increased risk of blood clots in the legs or lungs. In some of these studies, the women were not as healthy as participants in the WHI or the HRT dosage was higher than the dosage used in our study. The actual risk of DVT was still much lower than that of other health problems like heart attacks or strokes.

The Women's Health Initiative will be looking carefully to see if hormones will increase blood clots in women. At this point, most women are *not* at risk of DVT. It is generally believed that the benefits of HRT are much greater than the risks.

How can I reduce my risk of blood clots?

Keep those legs moving! If you need to be in bed because of an illness, make sure you do leg and foot exercises several times each day (see exercises below). On a long plane flight or long car trip, you can do these exercises while sitting. You should also get up to walk around as much as possible.



If you go into the hospital, ask your doctor about your risk of getting blood clots. Usually, leg exercises, special stockings, or equipment can help keep the blood flowing.

In some cases, you may be given a pill or shot to thin your blood. Be sure to tell your doctor that you are taking WHI hormone study pills, so that the doctor can decide whether to continue or stop your pills while you are in the hospital. Your doctor can call the WHI clinic for more information.

Should I take WHI study pills?

Most women who are eligible to join the WHI Hormone Program are not at high risk for DVT. If you join this program and a doctor ever tells you that you have a blood clot in your legs or lungs, please notify us immediately and *permanently* stop taking your hormone study pills.

If you join this program, you may need to *temporarily* stop your hormone study pills for certain health changes, such as:

- a broken leg, hip, or back, or any other reason for having a cast on your leg
- an operation during which you are put to sleep (general anesthesia) or have an anesthetic given in your back (regional or spinal anesthesia)
- a serious injury, such as a car accident, or a burn that requires hospitalization
- a stroke or heart attack
- any severe illness that causes you to be in bed and unable to get up for more than 5 days
- any other health change that your doctor or the WHI clinic staff believes may increase your risk of blood clots

Once you are better, you should be able to start taking your pills again. The WHI clinic staff can work with you and your doctor to decide on the right time.

If you or your doctor have questions about your risk for DVT, please contact the WHI clinic at

Thank you for your interest in the Women's Health Initiative!