

March is DVT Awareness Month

DVT, or deep vein thrombosis, is a condition in which blood clots form in a vein, usually in the leg. The medical term for the formation of a blood clot is thrombosis. When a blood clot forms in the deep veins in the leg, it can be life-threatening. The clot can break free and travel to the lung, where it is known as a pulmonary embolism, and can be potentially fatal.

Pulmonary embolism is the third most common cause of death in the United States, with about 300,000 fatalities annually. It is the most common cause of unexpected death in most age groups. More Americans die from DVT and pulmonary embolism than breast cancer, automobile accidents, and AIDS combined. In an effort to raise awareness of this serious and potentially fatal condition, the U.S. Surgeon General has recently issued a Call to Action, making DVT a public health priority.

Many factors enhance the risk for deep vein thrombosis and pulmonary embolism. These include recent surgery, severe illness or trauma, prolonged immobility, pregnancy, cancer, oral contraceptives and hormone replacement therapy, obesity, varicose veins, and smoking. In addition, long-distance travel with prolonged sitting increases the risk for blood clots, a condition known as economy-class syndrome. Furthermore, some individuals have an inherited blood clotting disorder which raises the risks further.

Only about half of indi-

viduals with deep vein thrombosis have typical symptoms. The most common symptoms include leg pain and swelling, often only in one leg, which occur suddenly or over a short period of time. The symptoms are quite different if a blood clot breaks loose and travels to the lungs, causing a pulmonary embolism. These symptoms include chest pain, shortness of breath, rapid pulse, and coughing. Pulmonary embolism can cause sudden cardiovascular collapse, and approximately 10 percent of individuals die in the first 60 minutes.

The diagnosis of deep vein thrombosis can be confirmed by an ultrasound scan of the legs. This is a highly accurate, non-invasive, and painless means of visualizing the veins and any blood clots which may be present. In some instances, a special blood test, or D-dimer, may be measured as a sign for recent blood clotting. Pulmonary embolism is typically diagnosed by a chest CT scan, a lung scan, or a pulmonary angiogram.

Deep vein thrombosis and pulmonary embolism are treated with medications called blood thinners, or anticoagulants, which decrease the blood's ability to clot. These medications stop clots from getting bigger and prevent additional blood clots from forming. The body will then naturally dissolve the existing blood clots over time. In some cases, if the blood clots are large or if symptoms are severe, special procedures

and drugs may be necessary to actually dissolve the existing blood clots. Additionally, some individuals may require the placement of a special device, called a filter, in the inferior vena cava to prevent the potentially fatal passage of blood clots from the legs to the lungs.

In some cases, long-term consequences of deep vein thrombosis can develop. The leg veins can remain obstructed by persistent blood clots or scar tissue, and the valves in the vein may become damaged and dysfunctional. This may result in chronic leg swelling, pain, varicose veins, skin discoloration, eczematous skin changes, and ulcerations. These symptoms, called the post-phlebotic syndrome, often result in disability and a diminished quality of life.

Deep vein thrombosis is largely preventable. Measures include the use of compression stockings, leg elevation, regular exercise, avoidance of idle standing and sitting, smoking cessation, and measures to control weight. Surgical patients can be given prophylactic doses of blood thinners, can be encouraged to ambulate soon after surgery, and can be fitted with support stockings or compression pumps.

Dr. Larry Stern is a general and vascular surgeon in Wayne County. He is the medical director of the Vein Specialty Center in Wooster, which specializes in the treatment of varicose veins and venous disorders. Dr. Stern can be reached at 330-264-5347.