

THROMBOSIS: ONE CAUSE, THREE POSSIBLE DEADLY OUTCOMES

Many people do not realize that thrombosis – a potentially deadly blood clot – is the one disorder that causes most of the world’s top three cardiovascular killers: heart attack, stroke and venous thromboembolism, or VTE – a blood clot found mostly in the leg and lungs.

The burden of these disorders is incalculable: millions of lives lost and billions upon billions of dollars expended to treat and care for those afflicted. The World Health Assembly has set a global target of reducing premature deaths from non-infectious disease, including cardiovascular, by 25 percent by 2025. *To meet this goal, we must reduce thrombosis.*

Blood Clots and Heart Attack

Heart attack (or myocardial infarction) is caused when the flow of oxygen-rich blood to the heart is disrupted. Before this happens, patients usually have coronary artery disease, in which plaque (a waxy, fatty substance) accumulates on the inside of one or more blood vessels leading to the heart. This buildup is called atherosclerosis. If the plaque ruptures, a blood clot may form where the rupture occurs. If the clot is large enough it may cut off blood and oxygen to the heart muscle. Simply put, when this occurs, the affected area of the heart dies. Immediate medical attention is necessary.

Blood Clots and Stroke

Stroke starts the disruption of blood flow and oxygen to the brain. While there are several types of stroke, the most common type – called ischemic stroke – is caused when a blood clot forms in an artery leading to the brain. Since brain cells perish within minutes if they are deprived of oxygen, it is essential that emergency medical personnel are called immediately if one suspects a stroke.

As with heart attacks, the buildup of plaque in arteries leading to the brain is often the precipitating factor for stroke. In many cases, atherosclerosis in the carotid artery starts the deadly cascade. However in some cases, an irregularly rapid beat of the heart’s upper chamber (known as the atrium) may be the catalyst. Atrial fibrillation causes blood to pool in the heart, which consequently causes blood clots, which may travel to the brain.

Blood Clots and Venous Thromboembolism

Venous thromboembolism is the third player in the cardiovascular trilogy. In VTE, a blood clot formed in the deep veins of the leg, called “deep vein thrombosis,” travels to the lungs where it can cause devastating damage. As with heart attack and stroke, if immediate medical help isn’t at hand, the patient may die.

For more information, go to WorldThrombosisDay.org.