

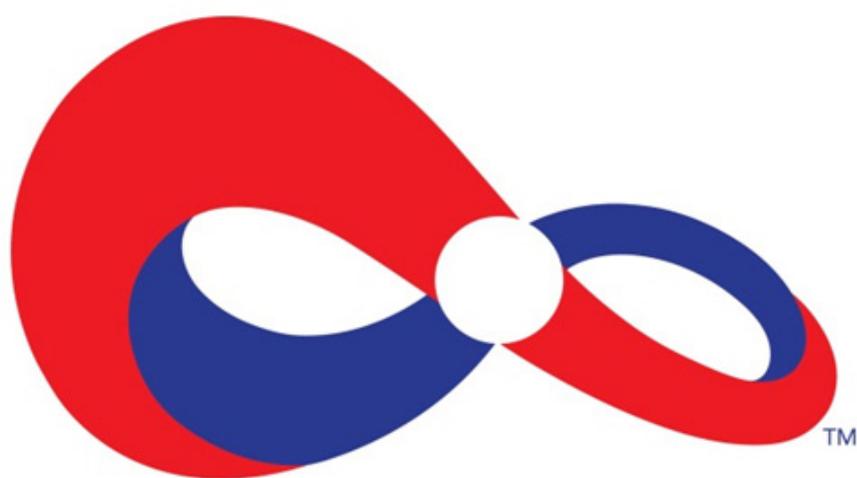
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World Thrombosis Day

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WORLD THROMBOSIS DAY

OCTOBER 13

Thrombosis is a major cause of death around the world.¹ Yet, astonishingly, this fact is not widely known. Most people have little or no understanding about the causes and effects of thrombosis, and how it can be prevented. While the global public is well aware of heart attack and stroke, there is little public dialogue about **thrombosis**, the common underlying disorder that precipitates the three leading causes of cardiovascular

death, including heart attacks (myocardial infarction), stroke and venous thromboembolism. The lack of public education and awareness about thrombosis, combined with health professionals' frequent failure to recognize and diagnose it in time, has added to the worldwide disease burden and is at least partially responsible for unnecessary disabilities and deaths.

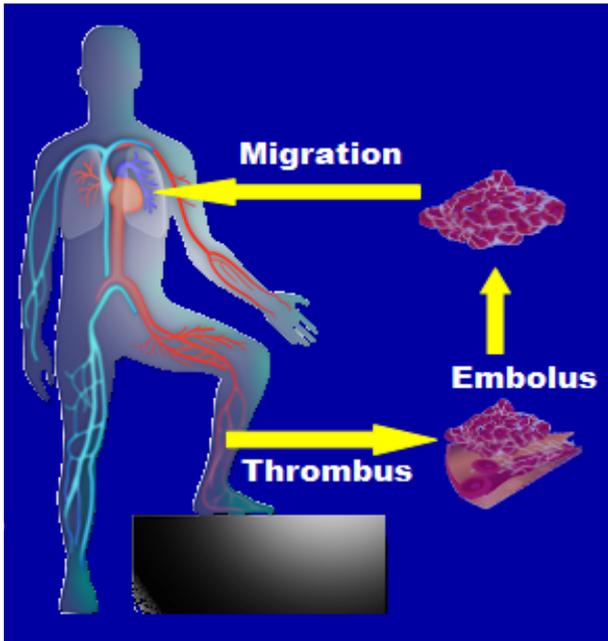


Figure 1 Deep vein thrombosis (DVT) and pulmonary embolism (PE) are two expressions of the same disease, collectively called venous thromboembolism (VTE)

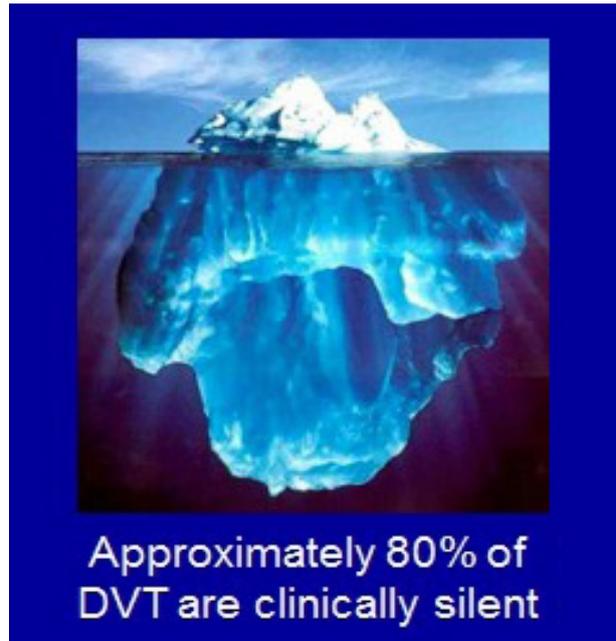


Figure 2 Venous thromboembolism: a silent, life-threatening disease

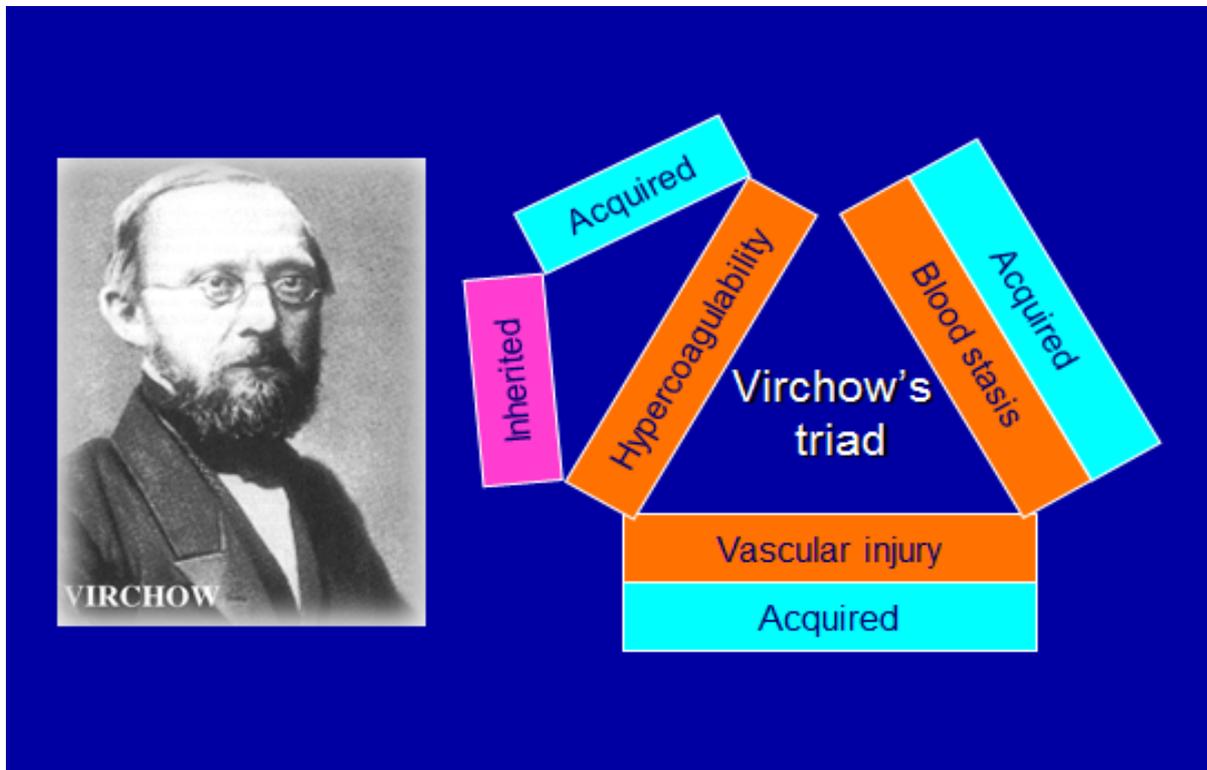


Figure 3 Pathophysiology of venous thrombosis (Virchow's triad)

While thrombosis contributes to multiple areas of disease burden, the inaugural World Thrombosis Day campaign in 2014 will focus on **venous thromboembolism (VTE)**, which includes deep vein thrombosis (DVT) and pulmonary embolism (PE) (Figure 1). It is one of the most serious and common but under-recognized thromboembolic conditions. DVT and PE are two expressions of the same disease. Approximately 50% of patients with proximal DVT of the leg have PE. On the contrary, DVT which is mainly asymptomatic or clinically silent is found in around 80% of patients with PE. Less than half of all cases of the fatal PE are detected prior to death.

Up to 1 in every 1,000 are affected by venous thrombosis in industrialized countries each year, which can lead to related long-term health problems such as post-thrombotic syndrome and chronic thromboembolic pulmonary hypertension. Up to 1 in 10 people who suffer a pulmonary embolism will die if not treated. Around 1 in every 1,000 women develops thrombosis during pregnancy. One in 3 surgical patients can develop a DVT if no (or incorrect) preventative measures are given. VTE is the most common cause of hospital deaths in the United Kingdom that can be prevented. Patients who survive DVT and PE are at significant risk of having a recurrent event. Thrombosis is often a 'silent' medical condition with no obvious signs or symptoms (Figure 2). It doesn't discriminate and can affect people of any age or sex. It can very easily be confused with less serious conditions - a clot in the leg can be mistaken for a sore leg muscle.

It is estimated that in Europe alone, half a million people die from VTE each year - more than the combined death total from AIDS, breast and prostate cancer and highway accidents.² In the United States, 100,000 to 300,000 individuals die due to VTE each year and VTE is associated with more than 500,000 hospitalizations.³⁻⁵ Elsewhere in the world, such as Asia and Thailand, the situation is likely to be equally dire with a lack of data masking the broad impact of thrombotic disorders.⁶ Simply put, many deaths and many near fatal events

can be avoided with adequate education, prevention and treatment.

The date of World Thrombosis Day, October 13, was chosen as it is the birthday of Rudolf Virchow, the German physician and pathologist who first coined the term "thrombosis" and made crucial advances in our understanding of it (Figure 3).

The objectives for the first WTD (2014) are to:

- Highlight the burden of disease (thrombosis in general) and highlight the need for action, specifically underscoring the unrecognized threat and serious consequences (morbidity and mortality) related to VTE.
- Increase public awareness of the significance, risks and signs and symptoms of VTE.
- Empower individuals to seek diagnosis promptly if they have symptoms or signs, and to engage their healthcare providers in appropriate prevention/treatment options.
- Galvanize national organizations in affected countries across the globe with a unified message about VTE.
- Advocate for "systems of care" to properly prevent, diagnose and treat VTE.

The long-term goal is consistent with the goal of major cardiovascular disease organizations-to reduce cardiovascular mortality by 25% by 2025. In 2012, World Health Assembly adopted a global target to reduce premature non-communicable mortality by 25% by 2025. In the case of thrombosis, this means reducing the number of undiagnosed cases, increasing the implementation of evidence-based prevention, encouraging health care systems to implement strategies to ensure "best practices" for prevention, diagnosis and treatment, and advocating for adequate resources for these efforts and increased support for research to reduce the disease burden from thrombosis.

An effort to bring together nations and local communities to tackle thrombosis, the quiet, underlying disorder that is the common mechanism of the world's three

top cardiovascular killers – heart attack, stroke and VTE, the World Thrombosis Day movement already has more than 115 partner organizations and societies from more than 60 countries around the world. A primary initiative of the International Society on Thrombosis and Haemostasis (ISTH), World Thrombosis Day is a vital effort to educate the public, health care professionals and policy makers about thrombosis risks, prevention and treatment and to help save the lives of people everywhere, regardless where they live.

World Thrombosis Day complements existing world awareness days such as World Heart Day and the World Stroke Day and helps round out the message about cardiovascular health. Reducing deaths from thrombosis, VTE and all other forms, is essential to significantly lowering overall mortality rates and improving the public's health and wellbeing worldwide. With World Thrombosis Day, the goal is to drive home this important fact – and through it, we hope to contribute toward reducing the number of undiagnosed cases, increasing the implementation of evidence-based prevention and encouraging health care systems to ensure best practices for prevention, diagnosis and treatment.

2014 World Thrombosis Day launch activities have been planned to set the wheels in motion and help individual country organizations with local activities. To launch World Thrombosis Day this year, our activities will include publishing an academic article on the burden of disease, producing customizable materials for local in-country

use and conducting global media relations activities. But the heart of World Thrombosis Day will be on the local level. World Thrombosis Day in-country activities will be the responsibility and at the discretion of local thrombosis and hemostasis societies, patient advocacy groups and other medical/scientific organizations. The full list of World Thrombosis Day goals and objectives can be found online at www.worldthrombosisday.org

For updates on World Thrombosis Day, stay connected with via social media:

Facebook (WorldThrombosisDay) and Twitter (@ThrombosisDay) using the hashtags #WorldThrombosisDay, #JoinWTDay14, #WTDay14 and #stopdeadlyclots.

References

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