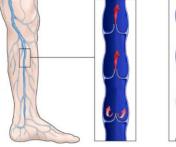
#### Venous Disease – Thrombophlebitis And Venus Thrombosis

#### Venous disease

**Venous disease** is any condition that affects the veins in body. Veins are flexible, hollow tubes that are part of the circulatory system that moves blood through your body. Veins bring oxygen-poor blood back to heart, which pumps your blood. Arteries carry oxygen-rich blood away from heart.





# What is venous disease?

- Veins have flaps (valves) inside that open when your muscles contract. This allows blood to move through your veins. When your muscles relax, the valves close, keeping blood flowing in one direction.
- If venous disease damages the valves inside your veins, the valves may not close completely. This lets blood leak backward or flow in both directions.

# Types of venous disease

- Blood clots: These can happen in your legs, arms, veins of your internal organs (kidney, spleen, intestines, liver and pelvic organs), in your brain (cerebral vein thrombosis), in your kidneys (renal vein thrombosis), or in your lungs (pulmonary embolism).
- **Deep vein thrombosis (DVT):** This is a blood clot that occurs in a deep vein (including arms and legs). Deep vein thrombosis itself isn't life-threatening. However, the blood clot has the potential to break free and travel through the bloodstream, where it can stick in your lung's blood vessels and become a pulmonary embolism. This can be a life-threatening condition.



- Superficial thrombophlebitis: This is a blood clot that develops in a vein close to the surface of your skin. These types of blood clots don't usually travel to your lungs unless they move from your superficial system into your deep venous system first. Typically, however, they cause pain.
- Chronic venous insufficiency: This condition causes pooling of blood, chronic leg swelling, increased pressure, increased pigmentation or discoloration of your skin, and leg ulcers known as venous stasis ulcers.
- Varicose and spider veins: These are abnormal, dilated blood vessels that happen because of weakening in your blood vessel wall.



- Venous ulcers: Ulcers are wounds or open sores that won't heal or keep returning. Venous stasis ulcers most commonly occur below your knee, on the inner part of your leg, just above your ankle.
- Arteriovenous fistulas: These are arteries and veins that connect to each other directly, with nothing in between. This is abnormal.

# Symptoms

- Pain, cramping or discomfort.
- Redness or warmth.
- Heaviness.
- Itching or burning feeling.
- Swelling.
- Bulging veins.

#### Causes

- Issues with how your veins formed when you were born.
- Injury.
- Other venous diseases.
- Weak blood vessel walls because of pregnancy, aging, cysts or tumors.
- High blood pressure.

#### What are the risk factors for venous disease?

- Family history of venous disease.
- Pregnancy.
- Having a BMI (body mass index) greater than 30.
- Being a woman or assigned female at birth (AFAB).
- Sitting or standing for long periods of time.
- Taking birth control pills or hormone replacement therapy.
- Using tobacco products.

# What are the complications of venous disease?

- Superficial thrombophlebitis: Deep vein thrombosis.
- Deep vein thrombosis: Chronic venous insufficiency or pulmonary embolism.
- Pulmonary embolism: Pulmonary hypertension.
- Varicose veins: Superficial thrombophlebitis or venous ulcers.
- Venous ulcers: Infections, like gangrene.

# How is venous disease treated?

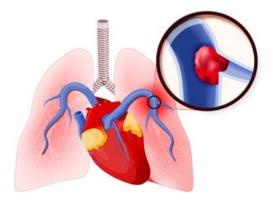
- Medications.
- Compression stockings or bandages.
- Lifestyles changes, such as eating foods with less fat, exercising more and giving up tobacco products.
- Procedures or surgeries.

#### Venous disease treatment may include:

- Anticoagulants.
- Endo venous ablation of varicose veins (with lasers, sclerotherapy or radiofrequency).
- Thrombectomy.
- Vena cava filter.
- Vein surgery.

#### symptoms of a pulmonary embolism, such as:

- Shortness of breath.
- Chest pain.
- Fast heartbeat.
- Cough.
- Bluish skin.



# Thrombophlebitis

• Thrombophlebitis is swelling (inflammation) of a vein. A blood clot (thrombus) in the vein can cause this swelling.





- Pregnancy
- Obesity
- Recent surgery (most commonly hip, knee, or female pelvic surgery)
- Too many blood cells being made by the bone marrow, causing the blood to be thicker than normal (polycythemia vera)
- Having an indwelling (long-term) catheter in a blood vessel

Blood is more likely to clot in someone who has certain problems or disorders, such as:

- Cancer
- Certain autoimmune disorders, such as lupus
- Cigarette smoking
- Conditions that make it more likely to develop blood clots
- Taking estrogens or birth control pills (this risk is even higher with smoking)

# Symptoms

- Swelling in the part of the body affected
- Pain in the part of the body affected
- Skin redness (not always present)
- Warmth and tenderness over the vein

#### **Exams and Tests**

- Blood coagulation studies
- Doppler ultrasound
- Venography
- Genetic testing

# **Possible Complications**

- Blood clot in the lungs (pulmonary embolism)
- Chronic pain
- Swelling in the leg

# Venus Thrombosis

- is a condition that occurs when a blood clot forms in a vein. VTE includes deep vein thrombosis (DVT) and pulmonary embolism (PE). DVT occurs when a blood clot forms in a deep veins, usually in the lower leg, thigh, or pelvis. DVTs can also occur in the arms, especially if there is a large intravenous central line in the vein.
- The risk of developing VTE is highest after major surgery, major injury, or during periods of infection and inflammation. This is because blood clots can develop in veins damaged by surgery or injury. Lack of movement after surgery or while traveling long distances can raise the likelihood of blood clotting. Inflammation and serious infection also raise the likelihood of blood clots. Swelling, redness, and pain are some of the symptoms of DVT. A pulmonary embolism can cause sudden chest pain and shortness of breath.