

Chronic Venous Insufficiency And Deep Venous Thrombosis

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Chronic venous insufficiency is a blood vessel disorder that affects mostly the veins of the lower limb. The marker of the disease is the pooling of blood in the venous system, mostly in the superficial veins of the lower limb. The pathophysiology of chronic venous insufficiency can be due to the formation of a thrombus in the veins, leading to a blockage of the venous blood flow or the insufficiency of valves to maintain blood in a unidirectional flow.

Confirmation of the exact cause of the condition has to be evaluated by the attending physician. Isolation of central causes like heart failure, which can also lead to the pooling of blood in the venous system, is essential when diagnosing this condition. An ultrasound is helpful in isolating venous obstruction and possible valve disorders. The pathophysiology of the case being explored determines the management practice to be carried out on the patient (Kelechi, 2015).

Deep venous thrombosis is a blood condition in which a blood clot forms in a deep vein in the body. The veins most often involved are the veins of the legs. The condition is common when the normal clotting processes of the body are affected by trauma or due to long-term immobility. Suffering from deep venous thrombosis predisposes the patients to a worse condition known as pulmonary embolism. Pulmonary embolism results when the blood thrombi break and are deposited in the lungs. The depositions prevent efficient oxygenation of blood in the lungs and can lead to sudden death if not managed immediately (Burgazli, 2013).

While chronic venous insufficiency may show on the outside through the presence of superficial varicose veins and discolored parts of the skin, deep venous thrombosis is not visible, and it might remain subclinical. The main manifestations of deep venous thrombosis are pain in the legs and warmth of the affected leg.

Thrombosis, Patient Risk Factors, and Venous Disease

Thrombosis is the build-up of a blood clot in the vascular system during life. When the thrombus forms in an artery, it is called an arterial thrombus. The clinical manifestation of an arterial thrombus

depends on the organ involved. When a clot forms in the arterial system, it poses a risk of blocking blood flow to the organ served by that artery. When an artery serving the brain is blocked, the resultant reduction in flow can cause a stroke. When the arteries serving the heart are blocked, it results in heart muscle pain, known as angina. The most severely affected organs are the organs that are served by one artery with an absence of arterial anastomosis. Blocking the artery leads to ischemic damage to the resultant organ. The formation of arterial thrombi is more common in people suffering from atherosclerosis.

Venous thrombosis is the formation of clots in the veins during life. Venous thrombosis is more common in the legs and other body extremities, where blood travels back to the heart at a very low speed. The resultant symptoms depend on the severity of the clotting, with the common presentation being pain in the thrombosis region. Venous thrombosis can also remain asymptomatic. Such asymptomatic patients have a risk of developing embolism, a condition in which the clots break and are carried by the blood back to the heart. Since all blood that goes to the heart eventually flows to the lungs for oxygenation, the most common complication of venous thromboembolism is the development of pulmonary embolism.

Patient factors in the development of disease are the aspects that are unique to the patient whose occurrence affects the presentation and the possible management of the condition. While handling chronic venous insufficiency and deep venous thrombosis in female patients of childbearing age, it is crucial to confirm if the patient is pregnant. Pregnancy leads to a different management system and follow-up care (Townsend, 2013).

Pregnancy, Diagnosis, and the Management of Venous Complications

Pregnancy leads to an increase in the abdominal load and overall pressure. The increased abdominal contents and pressure may compress the abdominal vein, leading to increased pooling in the superficial veins of the legs. Even though this may be a sign of venous insufficiency, the condition disappears in most cases after giving birth. The increased stagnation of blood in the lower extremities during pregnancy predisposes the patient to venous thrombosis. It is crucial for the patient to maintain physical activity in order to maintain blood flow in the body's extremities.

Venous insufficiency in pregnancy can be diagnosed by the clinician based on the history, clinical exam, and confirmatory tests. During a physical exam, the clinician might notice engorged veins and edema. In most cases, the patient will not complain of pain in the affected areas. The most efficient treatment options involve physical therapy. The use of compression stockings to improve the movement of blood in the veins, coupled with increased physical activity, is helpful in the overall management of the condition.

The development of deep venous thrombosis in pregnant women, in most cases, is preceded by

varicose veins and obvious markers of an inability of the venous system to efficiently transport blood back to the heart. Other cases might be a build-up of formerly existing DVT, with the pregnancy being an aggravating factor (Marshall, 2014). Treatment of deep venous thrombosis in pregnant mothers is normally done using low molecular heparin preparations. Low molecular heparin is an anticoagulant drug that prevents the clotting of blood in the body of the patient without affecting the developing fetus. Other anticoagulants like Warfarin are effective in the treatment of deep venous thrombosis but with severe teratogenicity on the developing fetus (Hoeltzenbein, 2016).

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