

Pulmonary Hypertension and Venous Thromboembolism

Rita Badigeru *

G. Pulla Reddy College of Pharmacy,
Osmania University, Hyderabad, Telangana,
India

Received: October 08, 2021; **Accepted:** October 22, 2021; **Published:** October 29, 2021

*Corresponding author: Rita Badigeru

✉ badigeru.rita@gmail.com

G. Pulla Reddy College of Pharmacy,
Osmania University, Hyderabad, Telangana,
India.

Citation: Badigeru R (2021)
Pulmonary Hypertension and Venous
Thromboembolism. Insights Biomed
Vol.6 No.10:48

Commentary

Chronic Thromboembolic Pulmonary Hypertension (CTEPH) is a complication of unresolved organised pulmonary emboli/thrombi obstructing the major pulmonary arteries. The aim of this study was to estimate the incidence and risk factors of CTEPH in a cohort with first venous thromboembolism (VTE). CTEPH is a rare, progressive pulmonary vascular disease that is usually a consequence of prior acute pulmonary embolism.

Pulmonary embolism is a blockage in one of the pulmonary arteries in your lungs. In most cases, pulmonary embolism is caused by blood clots that travel to the lungs from deep veins in the legs rarely, from veins in other parts of the body. Because the clots block blood flow to the lungs, pulmonary embolism can be life-threatening. Prompt treatment greatly reduces the risk of death. Taking measures to prevent blood clots in your legs will help protect you against pulmonary embolism. Failure of thrombi to resolve which may be related to abnormal fibrinolysis or underlying haematological disorders.

It is now known that small-vessel abnormalities also contribute to functional impairment, haemodynamic compromise, and disease progression in CTEPH. Small-vessel disease can occur in obstructed areas, possibly triggered by unresolved thrombotic material, and downstream from occlusions, possibly because of excessive collateral blood supply from high-pressure bronchial and systemic arteries. The degree of small-vessel disease has a substantial impact on the severity of CTEPH and postsurgical outcomes. CTEPH has emerged as one of the leading causes of severe pulmonary hypertension. CTEPH is characterized by intraluminal thrombus organization and fibrous stenosis or complete obliteration of pulmonary arteries. Common signs and symptoms include shortness of breath.

This symptom typically appears suddenly and always gets worse with exertion. Chest pain which may feel like you're having a heart attack. The pain is often sharp and felt when you breathe in

deeply, often stopping you from being able to take a deep breath. It can also be felt when you cough, bend or stoop. The cough may produce bloody or blood-streaked sputum. Pulmonary embolism occurs when a clump of material, most often a blood clot, gets wedged into an artery in your lungs. These blood clots most commonly come from the deep veins of your legs, a condition known as deep vein thrombosis (DVT). The portions of lung served by each blocked artery are robbed of blood and may die. This is known as pulmonary infarction.

This makes it more difficult for lungs to provide oxygen to the rest of your body. Pulmonary embolism can be a life-threatening. About one-third of people with undiagnosed and untreated pulmonary embolism don't survive. Pulmonary embolism can also lead to pulmonary hypertension, a condition in which the blood pressure in your lungs and in the right side of the heart is too high. When you have obstructions in the arteries inside your lungs, your heart must work harder to push blood through those vessels, which increases blood pressure and eventually weakens your heart. Small emboli occur frequently and develop over time, resulting in chronic pulmonary hypertension also known as chronic thromboembolic pulmonary hypertension.