

## Pulmonary Hypertension

Pulmonary hypertension (PH) is a chronic and progressive condition characterised by high blood pressure in the arteries of the lungs (pulmonary arteries). It occurs when the blood vessels in the lungs narrow, become stiff, or are blocked, which increases resistance to blood flow through the lungs characterised. This elevated pressure in the pulmonary arteries can put a strain on the right side of the heart, leading to heart failure if left untreated.

There are several types of pulmonary hypertension, including:

1. Pulmonary arterial hypertension (PAH): This is a specific form of PH where the small pulmonary arteries constrict and become thickened, leading to increased resistance to blood flow.
2. Pulmonary hypertension due to left heart disease: It occurs as a result of left-sided heart conditions, such as heart failure or valvular disease, which increase pressure in the pulmonary veins and, subsequently, in the pulmonary arteries.
3. Pulmonary hypertension due to lung diseases and/or hypoxia: This type of PH is associated with lung conditions such as chronic obstructive pulmonary disease (COPD), interstitial lung disease, or sleep apnea, where low oxygen levels in the blood cause constriction of the pulmonary arteries.
4. Chronic thromboembolic pulmonary hypertension (CTEPH): It is caused by chronic blood clots in the pulmonary arteries, leading to increased pressure and vascular remodelling.

The symptoms of pulmonary hypertension may vary depending on the underlying cause and the stage of the disease. Common symptoms include shortness of breath, fatigue, chest pain, dizziness, fainting, swelling in the ankles or legs, and a racing heartbeat. However, these symptoms are nonspecific and can be present in other conditions as well.

Diagnosis of pulmonary hypertension involves a thorough medical history, physical examination, and various diagnostic tests. These tests may include echocardiography, pulmonary function tests, chest X-ray, blood tests, electrocardiogram (ECG), and right heart catheterisation to directly measure the pressures in the pulmonary arteries.

Treatment for pulmonary hypertension aims to manage symptoms, improve quality of life, and slow down disease progression. It often involves a multidisciplinary approach, including medications, lifestyle modifications, and in some cases, surgical interventions such as lung transplantation or pulmonary artery balloon dilation.

Medications are also available to treat PAH. Oxygen therapy may be recommended for patients with low blood oxygen levels. Regular exercise, a healthy diet, and avoiding factors that can worsen symptoms, such as smoking and high altitudes, are also essential.

It's important for individuals with pulmonary hypertension to work closely with consult your doctors at SunStar Clinics to manage their condition effectively. Regular follow-ups and monitoring of disease progression are necessary to adjust the treatment plan as needed.