

Pulmonary Hypertension

A Rare, Progressive and Debilitating Disease

We have all been warned to avoid the risks of high blood pressure, by managing it with a good diet and exercise. Yet many remain unaware of some of the more life-threatening side effects of high blood pressure of the lungs - pulmonary hypertension disease.

This affects the arteries of the lung and the right heart chambers. When the pulmonary blood pressure gets too high, the arteries in the lungs can narrow which dampens blood flow. This becomes a problem when the heart has to work harder in order to pump the blood to the lungs, eventually making the right heart muscle weak and possibly leading to heart failure.

Malaysia has an estimated number of 300 to 1,500 patients living with this condition, both in treatment and undiagnosed. IJN is currently providing care to over 700 patients with pulmonary arterial hypertension and in doing so, have provided further insight into the symptoms, causes and risk factors that develop from the disease.

SYMPTOMS



Shortness of breath during physical activities



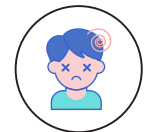
Chronic cough



Leg and tummy swelling



Dizzy spells



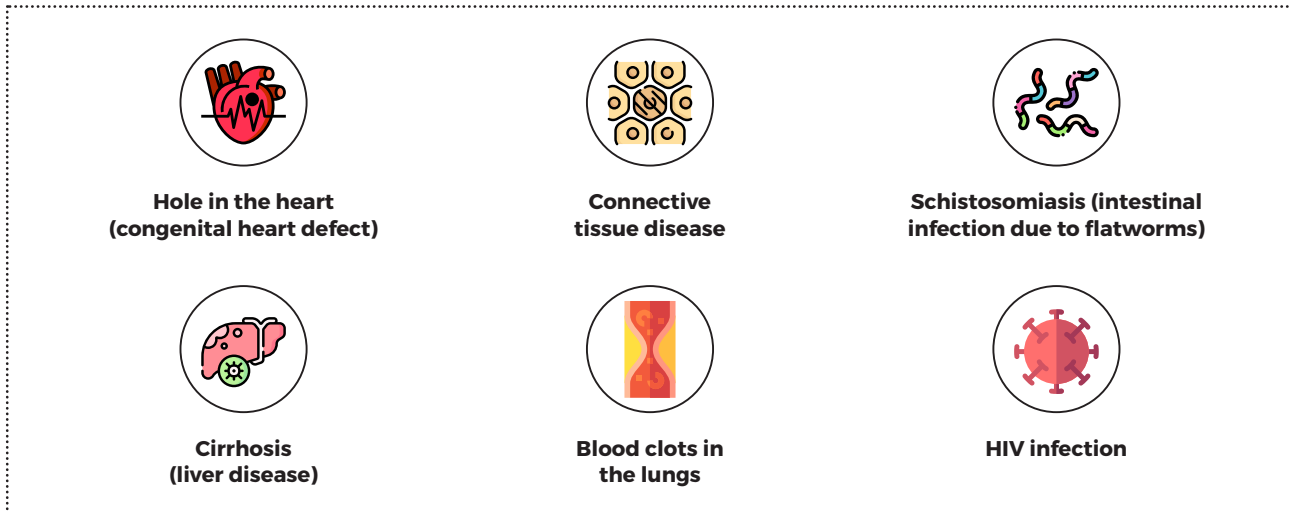
Loss of consciousness

CAUSES

Pulmonary hypertension is a complex disease that is separated into five groups.

- ▶ **Group 1:** cases are idiopathic, which means there is no specific reason for high blood pressure in the lungs. It can be hereditary or drug-induced, most notably from a slimming drug.
- ▶ **Group 2:** cases are due to left-side heart disease.
- ▶ **Group 3:** occur in conjunction with lung disease.
- ▶ **Group 4:** cases are caused by blood clots inside the lung vessel.
- ▶ **Group 5:** includes patients that have pulmonary hypertension as a result of other health conditions like kidney disease, thyroid disease, blood disorders and even a rare condition known as Sarcoidosis.

Other underlying causes commonly associated to pulmonary arterial hypertension:



DIAGNOSIS

This disease is tricky to diagnose, and those with early-stage pulmonary hypertension will take about 1-2 years from symptom onset to finally be diagnosed. This is because it is a progressive condition that develops slowly without specific symptoms.

More often than not, by the time the disease has been identified, it has already progressed to a more advanced stage. When diagnosed late, the patient's heart will already be weaker which can make administering the right treatment even more challenging.

An echocardiogram can inform doctors the probability that a patient has this disease, which will allow a medical professional to continue with additional checks to diagnose the disease and which specific group it belongs to.

The additional work will include blood tests, computed tomography - scan and right heart catheterisation where a catheter is introduced into a vein in the patient's groin or neck to measure the lung pressure.

Different forms of diagnosis

- 1 Health screening
- 2 Electrocardiogram
- 3 Echocardiogram

MANAGEMENT

Making the right lifestyle modifications can help any patient suffering from pulmonary hypertension to live a longer and more painless life.

Women with pulmonary hypertension have a high mortality rate of 30% - 56% during pregnancy and are generally advised to be cautious. If they do, they will need careful monitoring by a multidisciplinary team.

Air travel can also be risky for patients because the oxygen concentration in the air becomes lower at a higher altitude. This can cause the patient to experience shortness of breath.

Patients are also advised to reduce water and salt intake to prevent water retention in their body. Treatment options are quite limited but doctors commonly use oral medications, which have shown effectiveness to reduce pressure in the lungs.

If the effects of the drug are not satisfactory then the patient needs additional medication which will need to be taken for life.

Some patients living with severe pulmonary hypertension may opt for a lung transplant. However the chances of finding a compatible transplant can be low due to lack of donors in the country.