

Pulmonary Arterial Hypertension

Pulmonary Arterial Hypertension (PAH)

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Objectives:

1. Identify three symptoms and causes of PAH.
2. List two treatments for PAH.
3. Describe two lifestyle changes for relief of PAH.

Pulmonary Arterial Hypertension (PAH) is high blood pressure in the arteries leading from the heart to the lungs. Untreated, it can lead to disease especially congestive heart failure, kidney disease, stroke and even blindness.

The main symptom of PAH is shortness of breath with exertion (dyspnea).

Other symptoms can include:

- chronic fatigue
- swelling of the legs and ankles (edema)
- dizziness, especially when climbing stairs or upon standing up
- fainting (syncope)
- chest pain (angina).

Many different conditions can cause PAH, including:

- HIV infection
- illegal drug use (cocaine, methamphetamine)
- autoimmune diseases (lupus, scleroderma, and rheumatoid arthritis)
- venous thromboembolic disease (blood clots in the lungs)
- chronic lung diseases (emphysema, chronic bronchitis, or pulmonary fibrosis).

As the disease advances, the pumping action of the heart grows weaker and energy decreases. These symptoms may not be obvious at first, but over time they can become more severe. They are caused by both a lack of oxygen due to narrowed blood vessels in the lungs and increased stress on the heart.

In the more advanced stages, a person with PAH:

- is able to perform very little activity
- has symptoms even when resting
- may become completely bedridden.

A person with undiagnosed pulmonary hypertension may first visit the doctor for shortness of breath. The doctor then seeks the cause, gathering information through a medical history and diagnostic tests such as:

- echocardiogram
- computed tomography (CT scan)
- electrocardiogram (ECG or EKG)
- blood tests.

Once the diagnosis is confirmed, forging a team with local or regional cardiologists and pulmonologists is central to treating patients with PAH.

There is no cure for pulmonary hypertension. It is a progressive disease meaning that it tends to get worse over time. That is why an early diagnosis is so important. There are medical treatments that can relieve some of the symptoms, slow the progress of the disease, and extend life. Inhaled oxygen can improve shortness of breath and help people live longer with pulmonary hypertension that is caused by chronic lung disease. Blood thinners (anticoagulants) can help people with chronic blood clots in the lungs. Diuretics can reduce fluid in the body and reduce swelling in the feet and legs.

Lifestyle changes such as exercise may be the best treatment of PAH. Healthy eating of more fruits, vegetables and whole grains and less salt, losing weight, and quitting smoking may be sufficient to bring blood pressure into the normal range in early stages of this disease.

References:

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<http://www.pph-net.org/pph-surgery-treatment>

Melissa J. Luther, BS <http://onehealthylifestyle.com/physical-health/diseases/hypertension>

The NAHUC Contact Hour Quiz that accompanies this article is on page 11 of this issue.