

A short note on pulmonary hypertension

Anna Green*, John Vo

Abstract

Hypertension is one of the serious health issues that is been draining the health conditions of the people round the globe. There are many events that make one to suffer starting from a school going children to an old aged person. Therefore, it has becoming emerging criteria to control emotions and the situation such that it will help to maintain the blood pressure levels at the normal, without intake of the any medication. In this commentary article, the parameters which are used for diagnosing the PHT as well as the treatment methods are listed.

Keywords: Pulmonary Hypertension (PHT); Blood pressure; Blood pumping

Introduction

As we all know that the blood is carried out from heart to the different parts of the body, the pressure that is created during the blood pumping is normal and to those whose blood pumping raises i.e., rise in the blood pressure is known as Hypertension. In general, the blood pressure affecting the arteries in the lungs and heart is known as the Pulmonary Hypertension (PHT). The symptoms include shortness of breath, dizziness and pain in the chest. People may also suffer from fatigue, inability to exercise, low blood pressure and fast heart rate. Also most commonly observed symptoms are shortness of breath, swelling of legs and chronic cough. Treatment of it depends on the severity of the disease the condition worsens over time if ignored medication and oxygen therapy can help lessen the symptoms and improve the health condition. The diagnosis can be done by blood tests and imaging tests they include the following.

Diagnostic ways for PHT

Blood test

They help determine the cause of pulmonary hypertension.

Chest X-ray

It is used to check the heart and lungs conditions also shows enlargement of right ventricle or the pulmonary arteries.

Electro cardiogram

It is also called as ECG. It's a noninvasive test shows the hearts electrical Patterns of the heart beat and detects the abnormal beats of the heart.

Echocardiogram

The sound waves are used to create images of the heart beats helping the doctors to diagnose the abnormalities in the beats of the heart.

Magnetic resonance imaging

It is also called as MRI. Scanning is done by using magnetic field and pulses of radio wave energy to make pictures of the body and shows blood flow in the pulmonary arteries and determines its condition and many other techniques are also available for diagnosis.

Classification of PHT

The Pulmonary hypertension can be classified as follows based on its severity. They are;

Class I

Shows no symptoms during activities.

Class II

No symptoms are seen at rest but symptoms like fatigue shortness of breath and chest pain occur with activity.

Class III

Comfortable at rest but symptoms occur during physical activity.

Class IV

Symptoms occur both during rest and physical activity.

Treatment for PHT

The treatment for the PHT includes two possible ways one is through care and other through medical care and is explained in detail in the following;

Supportive and self-care

Supportive care: The supportive care includes oxygen therapy in which the patient is given extra oxygen to the lungs to breathe who are suffering from breathing problems.

Self-care: It includes daily physical exercise most importantly exercise showing good effect on cardiovascular system is preferably to be followed. Also taking good food and protein diet can also minimize the severity.

Medical care: Treatment can also be done by medication which includes vasodilators which works by dilating the

Department of Medical Sciences, Harvard University, USA

Corresponding author: Anna Green, e-mail: anna_green01@hms.harvard.edu

Commentary Article

blood vessels and increasing the blood flow through that of the closed ones and few are listed;

Vasodilators: The commonly used vasodilators are epo-prostenol (flonan, velettri).

Endothelin receptor antagonist: These drugs reverse the effect of endothelin which is a substance present on the walls of the blood vessels that causes narrowing of the blood vessel. Bosentan, macitentan are commonly used endothelin receptor antagonist. They may cause liver damage on few cases

Warfarin: It's an anti-coagulant. It helps to prevent the blood clots in pulmonary arteries. They are not recommended most often because they are blood thinners and may cause heavy bleeding during surgeries doctor's advice has to be taken to start or stop the usage of the drug.

Digoxin: This helps by boosting the heart beat and in-

creasing the blood pumped by the heart also controls irregular beats of the heart.

Diuretics: The most commonly called as water pills. They remove the water content from the body by the help of kidneys this reduces the heart functional rate.

Oxygen therapy: By inhaling pure amounts of oxygen is recommended in few cases.

Some cases arise where medication cannot cure the disease in that case surgery is preferred it can be done by two ways.

Conclusion

There are many alternatives ways to get rid of the Pulmonary Hypertension rather using this prolonged medical care. Therefore, the different diagnostic ways, treatment methods are given in brief in this commentary article.