PH Symposium

An intensive one-day conference on PH that aims to raise awareness for this rare disease ,enhance awareness and ensure the availability of all approved treatment.

PHA Nordica

PHA Nordica is a pulmonary hypertension association in Nordica, a multi- ethnic country.

www.phnordica.nd

Contents

Program for the PH Nordaica symposium, October 15, 2020

Fjord Hall, Hotel Ikea

08:30-09:00	Coffee and Networking	
09:00-09:15	Frederick Jameson, JD	Greetings
09:15-10:00	Prof. Jake Calderon	New trends in Nutrition
10:00-10:30	Dr. Peter Jenkins	Covid-19 – another foe?
10:30-11:00	Dr. Cecelia Erez	Children: unmet needs
11:00-11:20	Coffee break	
11:20-11:50	Dr. Jane Fonda	Let's stay fit
11:50-12:20	Prof. Kristian Paulus	Research of late
12:20-13:00	Lunch (in situ)	
13:00-13:20	Dr. Sidney Poitier	Latest drugs – a positive picture
13:20-13:50	Prof. Eitan Raz	Does your blood type count?
13:50-14:10	Dr. Lesley Ploef	Educational trends in Medicine
14:10-14:35	Coffee break	
14:35-15:05	Judy Linton, JD	Counseling or tranquilizers or both
15:05-15:35	Prof. Hendrik Knysna	A breath of fresh air
15:35-15:45	Dr. Yosef Gotlieb	Perspectives

15:45-16:00	**Board member**	**Thanks**

Pulmonary Hypertension (PH)

It means abnormally high blood pressure inside the lungs. PH is a rare blood vessel disorder of the lungs. The right ventricle pumps blood through your pulmonary arteries into your lungs. When the pressures are abnormally high, the right ventricle has to work harder to pump against this pressure .During the time, right ventricle may not function as well as it should ,and may become life threatening.

Five groups of (PH)

In 1973, pulmonary hypertension was classified into two groups. Group 1 if the cause was identified, or secondary pulmonary hypertension if the cause could not be identified.

Now the classification has been expanded into five groups, to emphasize the importance of the cause of the disease and our increased knowledge of the causes of pulmonary hypertension, along with the impact the causes have on disease progression and treatment.

Group 1: Pulmonary arterial hypertension

is associated with the narrowing of the small blood vessels in the lungs. It includes cases where the underlying cause of the narrowing is not known (idiopathic pulmonary hypertension).
Other subgroups include:

- Familial, or heritable pulmonary hypertension
- PAH caused by certain drugs or toxins
- PAH associated with other conditions like lupus, congenital heart problems, HIV, and sickle cell anemia.

Group 2: Pulmonary hypertension due to left heart disease

refers to pulmonary hypertension caused by left heart disease. Long-term problems with the left side of the heart can lead to changes in the pulmonary arteries and cause pulmonary hypertension.

Group 3: Pulmonary hypertension due to lung disease

such as chronic obstructive pulmonary disease (COPD),sleep-disordered breathing, like obstructive sleep apnea (OSA) and chronic high-altitude exposure.

Group 4: Pulmonary hypertension due to clots in the lungs.

Blood clots are the body's response to bleeding and injuries, but can harm the heart and lungs when they occur without an apparent cause.

Group 5: Pulmonary hypertension due to less common causes.

Which do not fit into any of the other four groups. Some of the causes may include blood disorders and certain types of anemia.

According to: https://pulmonaryhypertensionnews.com/what-causes-pulmonary-hypertension/

Pulmonary Arterial Hypertension Causes

Pulmonary arterial hypertension (PAH) is the first subtype of PH according to the **World Health Organization (WHO) definition**. This type of pulmonary hypertension is a result of a defect in the smaller branches of pulmonary arteries. These alterations that occur in patients with PAH are usually the most serious: since the main problem in PH occurs in

the pulmonary arteries, the condition can be treated at its roots, while it may not be the case in other subtypes of PH.

Causes for Idiopathic Pulmonary Hypertension

"Idiopathic" is a medical term that indicates that the reason for the disease is not known. Idiopathic pulmonary hypertension is also included in the first group of the disease and, as the name indicates, physicians diagnose it when they cannot define the underlying causes of the disease through exams and tests. The condition is particularly rare, with a prevalence of only two new patients in every million people reported annually. Unlike other diseases, the underlying causes cannot be treated, which makes the process more difficult.

Inherited Pulmonary Hypertension Causes

Cases where there is more than one pulmonary hypertension patient in the same family are also included in the first WHO group. When this is the case, physicians conduct a genetic test to search for a mutation that is inherited from parents to children. Researchers believe that the disease is related to one of the six genes BMPR-II, ALK1, ENG, SMAD9, CAV1 and KCNK3, and it is estimated that 10 percent of idiopathic pulmonary hypertension patients have a history of PH in the family.

Pulmonary Hypertension Caused By Other Conditions

There are other conditions that cause pulmonary hypertension and are included in the first WHO group to classify the subtypes of PH. Connective tissue diseases that affect the body's structure or composition of the tissue like **scleroderma**, congenital heart problems, high blood pressure

in liver (portal hypertension), HIV, determined medications or drugs, thyroid gland disorder, sickle cell disease, glycogen storage disorders, as well as rare blood conditions like pulmonary veno-occlusive disease or pulmonary capillary hemangiomatosis can also cause the disease. Figuring out which primary condition is causing pulmonary hypertension as secondary disorder is the first step to treating this form of the disease.

Causes of Persistent Pulmonary Hypertension of the Newborn

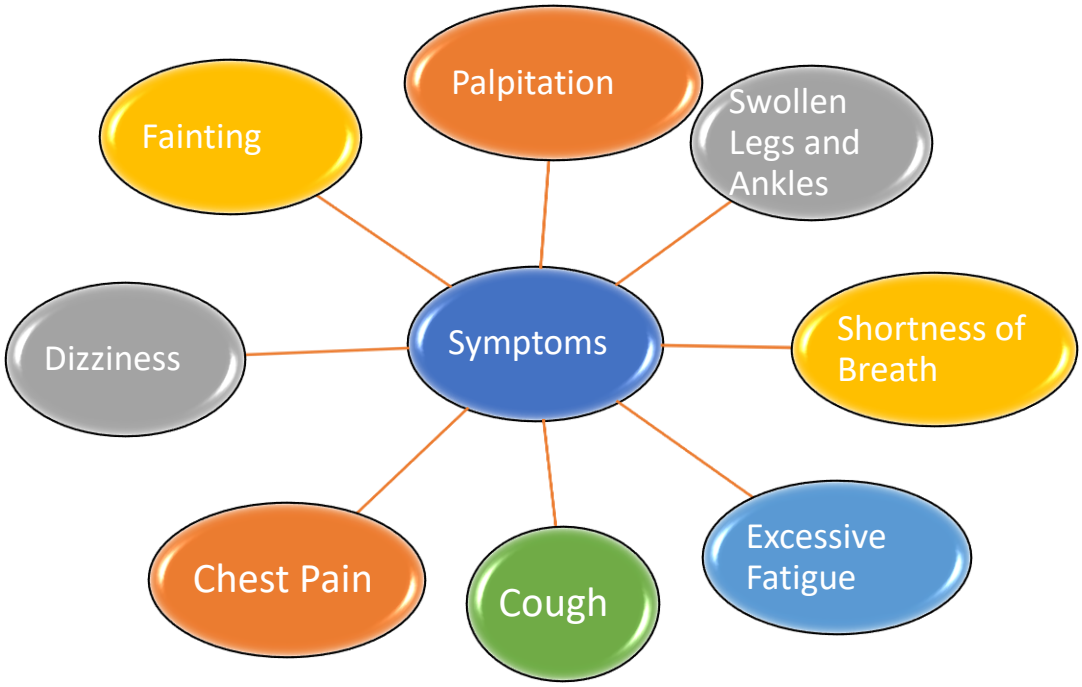
Persistent pulmonary hypertension of the newborn (PPHN) is a disease that affects about two in every thousand newborn babies or young children. The disease can be caused by severe pulmonary hyperplasia, which means underdevelopment of the lungs, hypoglycemia, which is an abnormally low level of glucose in the blood, the severe disease caused by infections called sepsis, meconium aspiration syndrome, a condition that occurs when the baby breathes in a mixture of amniotic fluid and their first feces (meconium), or genetic mutations.

Pulmonary Hypertension Caused by Left Heart Disease

Left heart disease is a common cause of pulmonary hypertension, and it comprises the second group of the WHO definition. The left side of the heart is the one that pumps blood from the heart to all the other parts of the body but the lungs. While the blood flows through the heart and pulmonary arteries, anything that affects the left side of the heart can also affect the right side of the heart, which is the side that pumps blood to the lungs. About 60% of patients who suffer from a severe left ventricle dysfunction, such as mitral valve disease or long-term high blood pressure, also suffer from or end up developing pulmonary hypertension.

The journey from symptoms to diagnosis:

The symptoms



Diagnosis

Some tests should be done before being diagnosed of PH. Some of these tests are:

- ***SIX -Minute walk:*** *During this test, the patient will walk up and down a hallway for 6 minutes.*

- ***Echo-Cardiogram(ECO):****It is an ultrasound machine that takes picture of the heart. These pictures will show how well is the patient's heart is pumping and estimate how high the blood pressure is in your pulmonary artery.*

- ***EKG*** *: The test shows the rhythm of the patient's heart and gives the doctor a rough measure of the thickness of the chambers of the heart*

- ***Cardiac Catheterization****: The Doctor uses a small plastic catheter to measure the blood pressure in lungs and heart. The patient may need to spend the night in hospital because the procedure takes several hours. It is the most accurate test for diagnosing PH*

The impact of Covid -19 on PH patients

It is currently unknown whether the risk of COVID-19 virus infection is higher in PH patients compared to the general population

Pulmonary Hypertension (PH) Community has significant concern worldwide.

For PH patients, here are some **Guidelines** for daily living during the pandemic from Center for disease control and prevention (CDC)and PH community ***:***

- Stay at home as much as possible.

- Keep space between yourself and others(at least 6 feet apart).
- Limit close contact to other people who are sick.
- Avoid touching your face, eyes, mouth and nose.
- Avoid all non-essential travel.
- Cover your mouth and nose with a cloth face cover, not surgical masks or N-95 respirators when around others ,but not to use these covers on young children under2 years old or anyone who has trouble breathing .
- Follow the CDC instructions on how to wear face coverings, how to make homemade cloth face covers, how to safely remove used face covers and how to safely clean cloth face covers.

Nutrition and diet in PH patients

"*You are what you eat*" Anthelme Brillat-Savarin, *Physiologie du Gout, ou Meditations de Gastronomie Transcendante, 1826*

Once diagnosed with PH, it is important that among the questions you ask your doctor are those regarding nutrition, as you can reduce your risks by maintaining a healthy diet. Medication you take can interact with your intake of food and it is important that there is a compatibility to avoid undesired side effects. Some foods can also be helpful in managing symptoms of the disease. It is likely your doctor will recommend limiting the amount of salt as suggested to anyone with high blood pressure, and other advice to reduce the risk of

complications of the disease. In research studies there seems to be a direct connection between obesity and the incidence of pulmonary hypertension.

So what are some general recommendations for diet?

- Seek a PH specialist for advice on supplements and diet to get started on your personalized nutrition plan
- Salt and sodium should be controlled
- Limit substances which cause blood pressure irregularities e.g. alcohol and caffeine
- A diet rich in iron can help manage the symptoms
- Reduce intake of vitamin K as an excess can influence blood-thinning medications
- Fluid retention can be affected by intake of fluids so should be monitored
- Whole grains, lean meat, low-fat dairy and plenty of fruits and vegetables are the base

Available to you through the Pulmonary Hypertension Association is the book

"Pulmonary Hypertension: A Patient's Survival Guide"
https://phassociation.org/product/pulmonary-hypertension-a-patients-survival-guide-ebook/

where you can find more information on diet, nutrition and various other topics.

The book will also be available for purchase at the symposium.

PH and Exercise

It's well-known that exercise is very beneficial for healthy individuals, increasing cardiovascular and muscular fitness, improving mood, controlling weight and lowering the risk of systemic hypertension and heart disease. Exercise may help lower the risk of chronic illnesses such as diabetes.

However, relatively little is known about the risks and benefits of exercise for pulmonary hypertension patients because of the varying severity from patient to patient. A PH specialist can help you create an exercise program that works for you. Always speak with your PH doctor before performing strenuous labor or beginning an exercise regimen.

Of course, beginning a new exercise program is ideally done when the patient is stable on medical therapy and has been tested to determine whether they have oxygen requirements with exertion.

Healthy exercise programs might include:

- Cardiovascular activities such as walking, biking, and swimming. Walking on an incline or exercising both arms and legs simultaneously can produce a greater increase in blood pressure than lighter exercise, so these exercises should be attempted conservatively.
- Activities focusing on muscle tone, such as stretching or arm and leg lifts are recommended. Low resistance exercises may be considered but should be done below shoulder or heart height and with frequent breaks.
- When doing exercises like yoga and Tai Chi, PH patients may work at their own pace. The mind-body aspect focuses on breathing and calms the nervous system which can reduce stress and improve mood.

If approved to perform an exercise regimen, follow these guidelines to have a safe and enjoyable workout:

- Do not over-exert.
- Use a recovery time of five to ten minutes.

£ A penny, a pound, a dollar, a cent $

Philanthropic support is vital for meeting our goals. We rely on the generosity of our friends to advance these goals, and invite them to donate to the global PH Association community. We offer a range of funding options to match donor abilities. If you would like to consider a gift to help in our many ongoing activities, please go into the link below:

DONATIONS

Or contact the Pulmonary Hypertension Association, Nordaica through:

Frederick JAMESON, JD
16 NordStrasse
Hovernntine, Nordaica 9080NZR
Telephone: 361-7-533 7752
Mobile Phone: 361-7-453 3785
Email: fjames@phnordica.org
Website: www.phnordica.nd