Hypersensitivity Pneumonitis

Pulmonary Fibrosis Foundation™
pulmonaryfibrosis.org

What is hypersensitivity pneumonitis?

Hypersensitivity pneumonitis, or "HP", is a lung disease in which inflammation and/or scar tissue ("fibrosis") builds up around the airways and in the walls of the air sacs of the lungs. About 1 out of 100,000 people in the U.S. have HP. HP is slightly more common in women than men, and can occur in persons of any age.

What are the symptoms of HP?

Shortness of breath and cough are the most common symptoms in patients with HP. Tightness of the chest, wheezing, weight loss, chills, and body aches can also occur. Symptoms can come and go and may be more severe when spending time in a particular location, such as a vacation or primary home, or the workplace. Some people experience symptoms that develop suddenly over days to weeks, and others have subtle symptoms that slowly worsen over years. Fatigue, depression, and anxiety are also commonly experienced by people living with HP.

What causes HP?

HP is the result of a reaction to inhaling particles or "antigens" in the air. "Antigens" that cause HP include airborne mold and airborne dusts from birds. In some cases, the antigen cannot be identified. On the other hand, some people never become ill despite exposure to antigens known to cause HP. Genetic differences might explain why this occurs.

How is HP diagnosed?

When a doctor or other healthcare provider suspects that a patient has HP, they will review potential antigen exposures in the environments that you frequently visit, and perform tests that might include measuring lung function (or "pulmonary function tests"), a chest x-ray, blood work, and a high-resolution CT scan (also known as CAT scan). In some cases, a diagnosis of HP can be made from these tests. In some cases, a bronchoscopy or lung biopsy may be performed.

How is HP treated?

The first step in treatment of HP is to work with your doctor to identify antigen(s) that may have caused the illness. Your doctor may recommend trying to clean up the area, or avoid visiting the area entirely.

In some cases, medications that weaken the immune system are used to treat HP. Treatment is individualized to each patient.

Lung transplantation is an appropriate treatment for some people living with HP. Early evaluation for lung transplant is important because the process involves a series of appointments to provide the patient with information about transplantation and to determine if they are an appropriate candidate.

TYPE OF PULMONARY FIBROSIS	CLUES THAT DOCTORS USE
Drug-induced	Prior or current use of amiodarone, nitrofurantoin, chemotherapy, methotrexate, or other drugs known to affect the lungs
Radiation-induced	Prior or current radiation treatment to the chest
Environmental (called hypersensitivity pneumonitis)	Exposure to mold, animals, or other triggers
Autoimmune (called connective tissue disease-related)	Joint inflammation, skin changes (particularly on the fingers and face), dry eyes or mouth, abnormal blood tests
Occupational (called pneumoconiosis)	Prior or current exposure to dusts, fibers, fumes, or vapors that can cause PF (such as asbestos, coal, silica, and others)
Idiopathic	When no cause can be identified

Supplemental oxygen, **pulmonary rehabilitation**, smoking cessation, routine vaccinations (such as influenza and pneumonia vaccination) may be useful in some patients living with HP. You can learn more about supplemental oxygen at: **https://www.pulmonaryfibrosis.org/life-with-pf/oxygen-therapy**

You can learn more about pulmonary rehabilitation at:
https://www.pulmonaryfibrosis.org/life-with-pf/pulmonary-fibrosis-treatment-options

What is my prognosis?

The prognosis of HP is variable, and depends on whether not pulmonary fibrosis is present. Those without signs of pulmonary fibrosis on a CT scan or lung biopsy may improve after avoiding the exposure causing disease or after other medical treatments, and can experience disease remission or resolution. When there is pulmonary fibrosis, it can be a sign of progressive disease, which means that fibrosis builds up over time, gradually causing worsening breathlessness and the need for increasing amounts of oxygen. Pulmonary fibrosis resulting from HP can lead to lung failure (medically called "respiratory failure"), which is a life-threatening condition. No one can predict exactly how long you will live with HP. Everyone is different. Your doctor can give you more detailed information about your prognosis.

Are there experimental therapies available?

You can search for research studies closest to you on our PFF Clinical Trial Finder: **trials.pulmonaryfibrosis.org.**

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