

Chronic Obstructive Pulmonary Disease

Each person has specific toxic exposures along with dietary and genetic weaknesses that are causing their symptoms. Toxic exposures can be inorganic like heavy metals, DDT, VOC's, Radio-active waste and any other chemical-like food additives or pesticides and fertilizers sprayed on the foods. They can also be organic or living organisms like parasites, bacteria, viruses, or fungi. All the different possible combinations make it difficult to accurately address issues unless you have experienced medical professionals mapping through all your different clinical symptoms.

Dr. Marilyn Tucker founded The Vibrant Health Community to do Symptom Mapping to be able to bring a completely personalized plan for each person. When you join the Vibrant Health Community you have your own medical team of doctor, pharmacist and health coach. This Team specializes in Integrative-Complementary Medicine. They will work with your personal physician to bring you to a place of as much natural healing as your body will allow. For those of you that have health issues that require prescription medications, your Team can help introduce natural measures that can reduce the imbalances and complications that inevitably come with prescription medication. This can reduce side effects and possible additional drugs having to be introduced.

Definition

Chronic obstructive pulmonary disease (COPD) is a group of lung diseases that cause swelling of the airways. Emphysema and chronic bronchitis are the most common forms of COPD.

Alternative Names

COPD; Chronic obstructive airway disease; Chronic obstructive lung disease

Causes, incidence, and risk factors

The leading cause of COPD is smoking. Between 15% and 20% of long-term smokers will develop COPD. Prolonged tobacco use causes lung inflammation and destroys air sacs in the lungs. (In rare cases, an enzyme deficiency called alpha-1 anti-trypsin deficiency can cause emphysema in non-smokers.)

Other risk factors for COPD are exposure to secondhand smoke, male gender, and working or living in a polluted environment.

Symptoms

- Shortness of breath (dyspnea) persisting for months to years
- Wheezing
- Decreased exercise tolerance
- Cough with or without phlegm

Signs and tests

An examination often reveals increased work involved in breathing: nasal flaring may be evident during air intake, and the lips may be pursed (the shape lips make when you whistle) while exhaling.

During a flare of disease, chest inspection reveals contraction of the muscles between the ribs during inhalation (intercostal retraction) and the use of accessory breathing muscles. The respiratory rate (amount of breaths per minute) may be elevated, and wheezing may be heard through a stethoscope.

A chest X-ray can show an over-expanded lung (hyperinflation), and a chest CT scan may show emphysema.

A sample of blood taken from an artery (arterial blood gas) can show low levels of oxygen (hypoxemia) and high levels of carbon dioxide (respiratory acidosis). Pulmonary function tests show decreased airflow rates while exhaling and over-expanded lungs.

Treatment

Treatment for COPD includes inhalers that dilate the airways (bronchodilators) and sometimes theophylline. The COPD patient must stop smoking. In some cases inhaled steroids are used to suppress lung inflammation, and, in severe cases or flare-ups, intravenous or oral steroids are given.

Antibiotics are used during flare-ups of symptoms as infections can worsen COPD. Chronic, low-flow oxygen, non-invasive ventilation, or intubation may be needed in some cases. Surgery to remove parts of the diseased lung has been shown to be helpful for some patients with COPD.

Lung rehabilitation programs may help some patients.

Lung transplant is sometimes performed for severe cases.

Expectations (prognosis)

This condition is associated with chronic (long-term) illness. The disease continues to worsen if tobacco use continues.

Complications

- Right sided heart failure or cor pulmonale (enlargement of the heart and heart failure associated with chronic lung disease)
- Arrhythmias
- Dependence on mechanical ventilation and oxygen therapy
- Pneumothorax (air outside the lung)
- Pneumonia

Prevention

Avoidance of smoking prevents COPD. Early recognition and treatment of small airway disease in people, who smoke, combined with smoking cessation, may prevent progression of the disease.