



EARLY DETECTION AND TREATMENT OF CHRONIC OBSTRUCTIVE PULMONARY DISEASE

Djabbarova Akida Mannapovna

Department: Internal Medicine, Nephrology and Hemodialysis.

Abdulatipov Akramjon G'ulomjon ògli

Tashkent Pediatrics Medical Institute 1 Pediatrics 318 group

Atoev Javokhir Avaz Ali

Tashkent Pediatrics Medical Institute 1 Pediatrics 318 group

Article history:

Received: November 11th 2022
Accepted: December 20th 2022
Published: January 28th 2023

Abstract:

The article covers significant points of early detection and treatment of chronic obstructive pulmonary disease. In addition, basic symptoms of the illness were analyzed deeply.

Keywords: COPD, symptom, preventable, chronic bronchitis, phenotypes, emphysema, antitrypsin.

COPD is a progressive, irreversible inflammatory disease of the lungs that makes it difficult to breathe. COPD affects more than nine million Americans and predominantly occurs in people who are middle-aged or older. It's also the fourth-leading cause of death in the United States. Cigarette smoking is the most common cause of COPD. Common symptoms include a persistent cough, wheezing, production of phlegm, shortness of breath, and a feeling of tightness in your chest, though these symptoms may not be noticeable until you're in the later stages of the disease. While COPD is not curable, it is a preventable and treatable illness. The earlier you start treatment, the better your prognosis. Chronic obstructive pulmonary disease (COPD) is a type of progressive lung disease characterized by long-term respiratory symptoms and airflow limitation. The main symptoms include shortness of breath and a cough, which may or may not produce mucus. COPD progressively worsens, with everyday activities such as walking or dressing becoming difficult. While COPD is incurable, it is preventable and treatable. The two most common conditions of COPD are emphysema and chronic bronchitis and they have been the two classic COPD phenotypes. Emphysema is defined as enlarged airspaces (alveoli) whose walls have broken down resulting in permanent damage to the lung tissue. Chronic bronchitis is defined as a productive cough that is present for at least three months each year for two years. Both of these conditions can exist without airflow limitation when they are not classed as COPD. Emphysema is just one of the structural abnormalities that can limit airflow and can exist without airflow limitation in a significant number of people. Chronic bronchitis does not always result in airflow limitation but in young adults who smoke the risk of developing COPD is high.

Many definitions of COPD in the past included emphysema and chronic bronchitis, but these have never been included in GOLD report definitions. Emphysema and chronic bronchitis remain the predominant phenotypes of COPD but there is often overlap between them and a number of other phenotypes have also been described.

The most common cause of COPD is tobacco smoking. Other risk factors include indoor and outdoor air pollution including dust, exposure to occupational irritants such as dust from grains, cadmium dust or fumes, and genetics, such as alpha-1 antitrypsin deficiency. In developing countries, common sources of indoor air pollution are the use of coal and biomass such as wood and dry dung as fuel for cooking and heating. Most people living in European cities are exposed to damaging levels of air pollution. The diagnosis is based on poor airflow as measured by spirometry. Most cases of COPD can be prevented by reducing exposure to risk factors such as smoking and indoor and outdoor pollutants. While treatment can slow worsening, there is no conclusive evidence that any medications can change the long-term decline in lung function. COPD treatments include smoking cessation, vaccinations, pulmonary rehabilitation, inhaled bronchodilators and corticosteroids. Some people may benefit from long-term oxygen therapy, lung volume reduction and lung transplantation. In those who have periods of acute worsening, increased use of medications, antibiotics, corticosteroids and hospitalization may be needed.

As of 2015, COPD affected about 174.5 million people (2.4% of the global population). It typically occurs in males and females over the age of 35–40. In 2019 it caused 3.2 million deaths, 80% occurring in lower and middle income countries, up from 2.4 million deaths in 1990. The number of deaths is projected to



increase further because of continued exposure to risk factors and an aging population. In the United States in 2010 the economic cost was put at US\$32.1 billion and projected to rise to US\$49 billion in 2020. In the United Kingdom this cost is estimated at £3.8 billion annually. Many people with COPD have mild forms of the disease for which little therapy is needed other than smoking cessation. Even for more advanced stages of disease, effective therapy is available that can control symptoms, slow progression, reduce your risk of complications and exacerbations, and improve your ability to lead an active life. The most essential step in any treatment plan for COPD is to quit all smoking. Stopping smoking can keep COPD from getting worse and reducing your ability to breathe. But quitting smoking isn't easy. And this task may seem particularly daunting if you've tried to quit and have been unsuccessful.

Talk to your doctor about nicotine replacement products and medications that might help, as well as how to handle relapses. Your doctor may also recommend a support group for people who want to quit smoking. Also, avoid secondhand smoke exposure whenever possible. Several kinds of medications are used to treat the symptoms and complications of COPD. You may take some medications on a regular basis and others as needed. Bronchodilators are medications that usually come in inhalers — they relax the muscles around your airways. This can help relieve coughing and shortness of breath and make breathing easier. Depending on the severity of your disease, you may need a short-acting bronchodilator before activities, a long-acting bronchodilator that you use every day or both.

REFERENCES:

1. "Chronic obstructive pulmonary disease". NICE. Retrieved 5 July 2021.
2. "Chronic obstructive pulmonary disease (COPD) - Complications | BMJ Best Practice". bestpractice.bmj.com. Retrieved 11 July 2021.
3. "Chronic obstructive pulmonary disease (COPD)". Fact Sheets. World Health Organization. Retrieved 1 July 2021.
4. Gold Report 2021, pp.20–27, Chapter 2: Diagnosis and initial assessment.
5. Gold Report 2021, pp.33–35, Chapter 2: Diagnosis and initial assessment.