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# A REVIEW ON CHRONIC OBSTRUCTIVE PULMONARY DISEASE

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### ABSTRACT:

Chronic obstructive pulmonary disease (COPD) is a respiratory disorder which resist air flow limitations into the lungs. It is the major cause of morbidity worldwide. It may be caused by smoking and air pollutants. It is a disorder which reduces the air flow into lungs and causes various respiratory problems like lungs infection, asthma, breathing problems etc. This disease sometimes causes serious health issues which may lead to death. This disease may cause mucus hyper secretion narrowing and destruction of lung parenchyma.

Keywords: copd, lungs infection, lung paremchyma, breathing problems.

## **Introduction:**

Chronic Obstructive Pulmonary Disease (COPD) is a term for lungs and air way disease that resist the breathing. People suffering from COPD may have breathing issues. airway inflammation. They also have damage in their air sacs.

Emphysema and chronic bronchitis are the both form of COPD. It is also called as chronic obstructive lung disease (COLD) & chronic obstructive airways disease (COAD). The main symptoms of COPD include breath shortness and cough, which may are may not produce mucus. COPD become worsen with every day activities such as walking. COPD is incurable it is preventable and treatable. There are two main types of COPD that are Emphysema and Chronic bronchitis.

COPD is a condition that mainly effects middle aged people or older people who usually use to do smoking. Many people don't realise that they are suffering from COPD but they are actually suffering from this disease this problem may reduce your daily activities like walking, exercise etc. although the treatment helps to keep the condition under control.

## SYMPTOMS OF COPD:

# There are various symptoms of COPD but some of the common symptoms are like

- 1. Shortness of breath.
- 2. Chesty cough
- 3. Chest infection
- 4. Less airflow through lungs
- 5. Whistling sounds in the lungs
- 6. Chest tightness
- 7. Lack of energy
- 8. Being tired
- 9. Swelling in ankles, feet or legs
- **10.** Weight loss
- 11. Trouble in breathing during physical activity.

# CAUSES:

There are various causes of COPD but today the main cause of COPD is using tobacco and frequently smoking. COPD may also occur from burning fuel during cooking and heating in homes that don't have good airflow. The person who has smoked for a long time sometimes doesn't show COPD symptoms but his lungs are damaged. It may cause the airway to become narrow and also destruction in some parts of lungs also mucus blocks the airways,

inflammation and airway lining. Frequently use of cooking fire without proper ventilation may also cause COPD. COPD may also cause by exposure to certain gases or fumes in the work place or exposure to heavy amount of second-hand smoke and pollution.

#### **DIFFERENTIAL DIAGNOSIS:**

- 1. Asthma.
- 2. asthma / cop overlap syndrome
- 3. interstitial lung disease
- 4. bronchiolitis obliterans
- 5. diffuse pantry bronchiolitis
- 6. heart failure
- 7. tuberculosis
- 8. thromboembolic disease
- 9. cystic fibrosis
- 10. Bronchiectasis

# **RISK FACTORS:**

There are various risk factors of COPD but some of the common factors are

#### 1. TOBACCO AND SMOKE:

Nowadays tobacco and smoke are a major risk factors of COPD the more you smoke or the more packs you smoke, the greater will be the risk. The people who breathe in large amount of second-hand smoke are also at risk of COPD.

#### 2. ASTHMA:

Asthma is a condition of COPD in which the airway become narrow or sometimes it may swell or may produce extra mucus which may cause high risk factors of developing COPD.

## 3. WORK PLACE EXPOSURE:

In long term exposure to chemical fumes, smoke, vapour and dust in the work place can irritate or may cause swelling in lungs which may rise the factors of COPD.

## 4. GENETICS:

AAT Deficiency caused by the gene change pass down in family may also cause COPD.

# PREVENTION;

There are various steps that can help to prevent to prevent the complications linked with COPD.

- 1. Quit Smoking can also help in lower risk of heart disease and lung cancer.
- 2. Regular talk with health care professionals.
- 3. Use wearing proper equipment that prevent you from breathing in work place exposure of chemical fumes, vapours and dust etc. NNN

### Lifestyle changes

- 1. Smoking Cessation: Quitting smoking is the most effective way to prevent COPD, as smoking is the leading cause of the disease worldwide.
- 2. Avoid Second-Hand Smoke: Stay away from second-hand smoke to reduce your risk of developing COPD.

# Managing health

- Get Vaccinated: Receive annual influenza vaccinations and pneumococcal conjugate vaccines (PCV13 and PPSV23) to protect against respiratory infections.
- Exercise Regularly: Engage in regular physical activity to improve lung function and overall health.

# TREATMENT:

There are various treatment of COPD but some of the common treatment are mentioned below,

- 1. Quitting Smoking: The most essential step in any treatment planned for COPD is quitting smoking. Smoking can cause the patient harder to breathe. Quitting smoking is sometimes not easy especially for those who are completely addicted.
- 2. Medicine; There are several kind of medicine that are used to treat COPD. The most common medicine used for COPD is inhaler. Nebulizer are given to the patients for clearing mucus from lungs which can help the patient to inhale properly.
- 3. Bronchodilators; These are the medicine usually come under inhalers. Bronchodilators can relax the mucus around the airways. These can also help in revive coughing and make breathing easier. Example. Salbutamol, Pro air, Pro Lentil.

# **MANAGEMENT:**

There are various management that can help to reduce the risk factors of COPD. Some of the common manager are.

- 1. Lifestyle Modifications
- 2. Pharmacological Therapy
- 3. Pulmonary rehabilitation
- 4. Oxygen therapy

#### 5. Surgical options

### Conclusion

Now a days COPD is a complex disease which can require a multi-Disciplinary approach for the treatment. Early diagnosis, lifestyle modifications, pharmacological advancements are the keys to improve a patient outcomes and reduces the risk factors of COPD. As it is a chronic lung disease that can impact the quality of life and global health. It can be cured by not using tobacco and smoke. With the help of a healthy diet and a healthy lifestyle this chronic disease can be cured easily. Excessive use of tobacco and other products like smoke and inhaling various chemicals can cause COPD. But can be cured by following various health programs or by following the directions given by a doctor.

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