

Treatment and Prevention of Acute Exacerbations of Chronic Obstructive Pulmonary Disease

Greenstone

Department of Internal Medicine, University of Health Sciences, Antalya, Turkey

SUMMARY OPINION

An acute exacerbation of Chronic Obstructive Pulmonary Disease (COPD) is characterised by a persistent worsening of dyspnea and sputum production in COPD patients. They can be treated in the community with oral steroids and antibiotics, but if the diagnosis is in dispute or if there are signs of severity such as disorientation, respiratory distress, or haemodynamic instability, a hospital referral is required. Failure to improve should prompt consideration of another diagnosis, therefore it's important to check in on a regular basis. Nebulized 2-agonists and anticholinergic bronchodilators should be given in the emergency room, and arterial blood gases should be checked. Non-invasive ventilation should be considered for patients with an arterial pH of 7.35 or less. If there is adequate home support, patients who are stable and not in type 2 respiratory failures should be evaluated for discharge. Warded patients should be discharged if they have been stable for 24 hours and both the patient and the doctor are sure that they can manage at home with 4 to 6 weeks of outpatient follow-up. At this point, about 25% of COPD patients may not have recovered to baseline lung function.

INTRODUCTION

Improve should prompt consideration of another diagnosis, therefore it's important to check in on a regular basis. Nebulized 2-agonists and anticholinergic bronchodilators should be given in the emergency room, and arterial blood gases should be checked. Non-invasive ventilation should be considered for patients with an arterial pH of 7.35 or less. If there is adequate home support, patients who are stable and not in type 2 respiratory failures should be evaluated for discharge. Warded patients should be discharged if they have been stable for 24 hours and both the patient and the doctor are sure that they can manage at home with 4 to 6 weeks of outpatient follow-up. At this point, about 25% of COPD patients may not have recovered to baseline lung function. Exacerbations of Chronic Obstructive Pulmonary Disease (COPD) are a major source of morbidity and mortality, and their frequency rises with the severity of the disease. Some patients have recurrent exacerbations that lead to hospitalisation, which has a significant impact on their quality of life and everyday activities.

Exacerbations of COPD are linked to physiological changes and enhanced airway inflammatory alterations produced by viruses, bacteria, and probably common contaminants. According to current research, proper therapy and prevention of exacerbations may alter the long-term outcome of COPD.

Bacteria play a variety of roles. The following bacteria have been linked to COPD:

- Streptococcus pneumoniae is a kind of bacteria that causes pneumonia.
- Haemophilus influenza is an infectious disease caused by the bacteria Haemophilus influenza
- Moraxella catarrhalis is an infectious disease caused by the bacteria Moraxella catarrhal

Gram-negative bacteria, particularly Pseudomonas aeruginosa, are also important in severe COPD. Patients with bacteria in their sputum are more likely to have exacerbations, recover more slowly, and have more severe symptoms. Many investigations have found no differences in bacterial species during exacerbations, while differences in bacterial strains acquired from patients have been observed.[1-5]

Differential diagnosis and diagnosis

COPD manifests itself in four ways:

- Cough
- sputum volume

Address for correspondence:

Greenstone, Clinical Pharmacist AZ Delta vzw, Deltalaan , 8800 Roeselare, Belgium, E-mail: bentlymark123@gmail.com

Word count: 650 Table: 00 Figures: 00 References: 05

Received:- 28 January, 2021, Manuscript No. ipaom-21-12654

Editor assigned:- 05 February, 2022, Pre QC No. P-12654

Reviewed:- 17 February, 2022, QC No. Q-12654

Revised:- 22 February, 2022, Manuscript No. R-12654

Published:- 28 February, 2022,

- sputum purulence
- dyspnoea

An acute exacerbation is defined as a rapid and prolonged worsening of sputum purulence and volume, as well as dyspnea.

These could be linked to the signs and symptoms of an upper respiratory infection (cold or sore throat).

Pneumonia and pulmonary embolism are among the possible diagnoses.

- pleural effusion pneumothorax
- illness of the heart (congestive cardiac failure, arrhythmias)
- fractured ribs
- Using sedatives in an inappropriate manner.

It's never easy to tell the difference between a pulmonary embolism and a COPD exacerbation, but it's even more difficult with severe COPD. The chest radiograph in severe COPD may only show hyper expansion with big pulmonary arteries. In both cases, the ECG indicates a right ventricular strain pattern. However, an embolic phenomenon is favoured by a low systolic

blood pressure and a failure to raise arterial oxygen tension beyond 8 kPa (60 mmHg) despite the use of high flow oxygen.

Here are some things you can take to help prevent COPD-related complications

- To help minimise your risk of heart disease and lung cancer, quit smoking.
- To lower your chance of illness or prevent it, get flu shot every year and a pneumococcal pneumonia vaccine on a regular basis.
- Unless you're feeling sad or helpless, or if you suspect you might be depressed, talk to your doctor..

CONFLICTS OF INTEREST

The authors declare no competing interests.

All authors declare that the material has not been published elsewhere, or has not been submitted to another publisher.

DATA AVAILABILITY

Authors declare that all related data are available concerning researchers by the corresponding author's email.

REFERENCES

<p>1. Tabrez MO, SR (2018) To study the clinical profile and management of acute small bowel obstruction at Acharya Vinobha Bhawe Rural Hospital, Sawangi (Meghe), Wardha. <i>Int J Sci Res</i> 5: 1636-1639.</p> <p>2. Chandak AM (2002) Historical landmarks in operations on the colon— Surgeons courageous. <i>Current Surgery</i>. 59: 91-95.</p> <p>3. Wright HK, O'Brien JJ, Tison MD (1971) Water absorption in experimental closed segment obstruction of the ileum in man. <i>Am J Surg</i> 121: 96-99.</p>	<p>4. Hossein SJ, Mulmule R, Bijwe VN (2017) A clinical study of acute intestinal obstruction in adults-based on etiology, severity indicators and surgical outcome. <i>Int J Res Med Sci</i> 5: 3688-3696.</p> <p>5. Souvik A, MZ, Amitabha D, Nilanjan M, Udipta R (2010) Etiology and outcome of acute intestinal obstruction: A review of 367 patients in Eastern India. <i>Saudi J Gastroenterol</i> 16: 285. .</p>
---	--