

COPD

TREATMENT OF EXACERBATIONS IN COPD

Exacerbations of Chronic Obstructive Pulmonary Disease (COPD) are important events in the management of COPD because they negatively impact health status, rates of hospitalisation and readmission, and disease progression. COPD exacerbations are complex events usually associated with increased airway inflammation, increased mucus production and marked air trapping. These changes contribute to increased breathlessness that is the key symptom of an exacerbation.

COPD exacerbations are defined as an acute worsening of respiratory symptoms that result in additional therapy

They are classified as

- Mild – treated with short acting bronchodilators only, SABDs
- Moderate – treated with SABDs plus antibiotics and/or oral corticosteroids
- Severe exacerbations – requires hospitalisation. May also be associated with acute respiratory failure

COPD patients need to receive education about the importance of understanding exacerbation symptoms and when to seek professional advice.

The goals of treatment for COPD are to minimise the negative impact of the current exacerbation and prevent the development of subsequent events. Long term prognosis following hospitalisation for COPD exacerbation is poor, with a 5 year mortality rate of 50%.

Bronchodilators

It is recommended that Short acting inhaled B2 agonists (SABAs) are the initial bronchodilators for acute treatment of a COPD exacerbation.

Salbutamol 100mcgs 2 -10 puffs every 4 hours (if using a metered dose inhaler (MDI) a spacer is recommended) OR one puff every one hour for two or three doses and then every 2-4 hours based on patients response

Glucocorticoids

Studies indicate that systemic glucocorticoids in COPD exacerbations shorten recovery time and improve FEV1. They also improve oxygenation. However you need to assess the risk benefit factor

Prednisolone 40mg for 5 days

Antibiotics

Antibiotics should be considered for patients with exacerbations of COPD who have three cardinal symptoms: increase in breathlessness, sputum volume, and sputum purulence; have two of the cardinal symptoms, if increased purulence of sputum is one of the two symptoms

Doxycycline 200mg stat 100mg once daily for 5 days

If Doxycycline contraindicated then Clarithromycin 500mg twice a day for 5 days

Improvement in breathlessness and sputum purulence suggest clinical success

Self-Management

Patients at risk of having an exacerbation of COPD should be given a self-management plan that encourages them to respond promptly to the symptoms of an exacerbation

When a patient starts treatment for an exacerbation of COPD they should contact the surgery to inform them and reorder their prescription. Further advice and referral if required should be offered by the surgery or relevant Health Care Professional

Osteoporosis

Consider bone protection for patients who require 3 or more courses of oral steroids per annum or who are on regular high dose inhaled corticosteroids.

Post Exacerbation Review

Education

Review Treatment

Smoking Cessation

Inhaler technique

Compliance

Pulmonary Rehabilitation

Vaccinations

Future Planning