

## Management of Acute Exacerbations of COPD

### PCRS-UK Protocols

An acute exacerbation of chronic obstructive pulmonary disease (COPD) is described as a sustained worsening of symptoms that is beyond normal day-to-day variation, and is acute in onset.

This is a significant event that may result in worsening prognosis. Acute exacerbations of COPD may be due to bacterial or viral infection, or poor air quality.

#### Symptoms

Two or more of these - Treat

1. Worsening dyspnoea
2. Cough
3. Increase in sputum volume
4. Increase in sputum purulence
5. Increased fatigue
6. An acute change in day-to-day symptoms

#### Assess diagnosis and severity

Consider whether other diagnoses need to be excluded, such as pulmonary embolus, pneumonia, pneumothorax and acute cardiac events. Once the diagnosis is established a clinical assessment of severity is required to determine management.

#### Consider Treatment at hospital or at home?

Factors to consider:

- Marked breathlessness
- SaO<sub>2</sub> 92% or below (unless this is normal for the person)
- ↓ Level of consciousness, confusion
- ↑ Respiratory rate
- Pursed lip breathing
- New onset cyanosis
- Chest pain
- Co-morbidities especially cardiac conditions, diabetes mellitus, anxiety and depression Receiving home oxygen (If saturations are the same as baseline and patient is well established on oxygen it is safe to treat at home)
- Social circumstance i.e. lives alone

#### Treatment

1. Give maximal dose of inhaled bronchodilators 10 puffs salbutamol +/- atrovent with a spacer 4 hourly or nebuliser therapy .
2. Give oral Prednisolone 30mgs stat and then daily for 7-14 days (unless contraindicated).
3. Give antibiotics if sputum has recently become purulent.

**1st line\*** Amoxicillin 500 mgs TDS for five days  
OR  
Doxycycline 200mgs stat then 100 mgs daily for five days

**2nd line\*** Co-Amoxiclav 625 mgs TDS for 7-10 days  
OR  
Clarithromycin 500mg BD for five days

\*if patient has co-existing bronchiectasis a 14-day course recommended. Give their last effective antibiotic and send sputum sample.

Home treatment: Call rapid response for nurse support -  
**07710 929672**

#### Assess for Cor Pulmonale and treat when present

Review as soon as possible following the exacerbation to ensure on correct medications and give self-help education as needed

- Revision of the action plan for subsequent exacerbations including who, when and how to contact
- Providing optimal maintenance therapy including drugs, oxygen and pulmonary rehabilitation as appropriate

Within licensed indications, oseltamivir is recommended for at risk patients who present with

Influenza-like illness within 48 hours of the onset of symptoms. (Zanamivir should be avoided because of the risk of bronchospasm.)

Self-Management Advice -

<https://www.blf.org.uk/Page/Self-management-tools>