

TREATMENT OF COPD EXACERBATION

FLAME LECTURE: 23

PRESTIA. 9.21.18

LEARNING OBJECTIVES

- ▶ To review the signs of a COPD exacerbation
- ▶ To describe treatments of a COPD exacerbation
- ▶ Prerequisites:
 - ▶ FLAME LECTURE 22: Diagnosis of COPD Exacerbation
- ▶ See also – for closely related topics
 - ▶ FLAME LECTURE 15/16: COPD Pathophysiology & Diagnosis

COPD EXACERBATION REVIEW

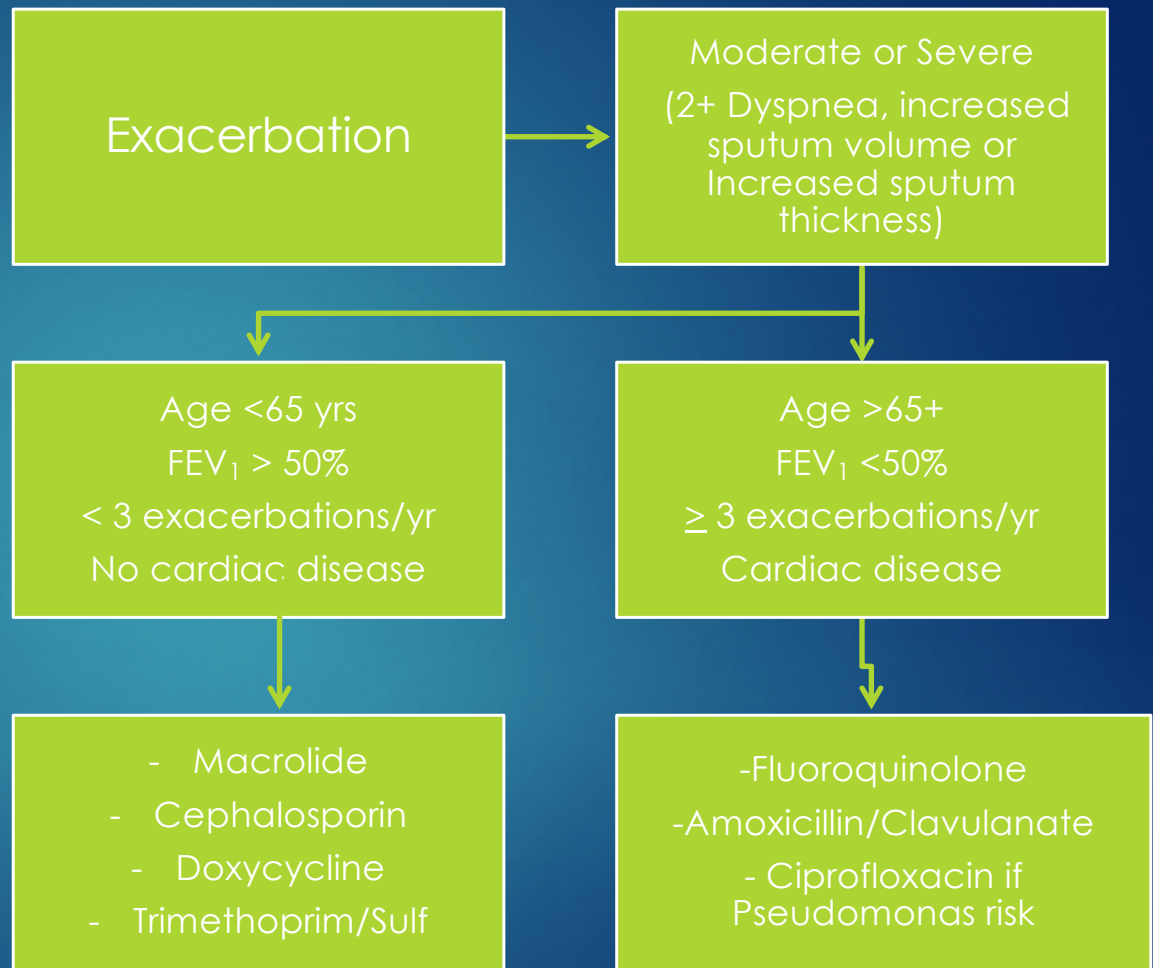
- ▶ COPD exacerbations are defined as an acute worsening of respiratory symptoms that require in additional therapy¹
- ▶ Classification:²
 - ▶ Mild – Treated with short acting bronchodilators only (SABDs)
 - ▶ Moderate – SABAs plus antibiotics and/or oral corticosteroids
 - ▶ Severe – Pt requires hospitalization or ED intervention
- ▶ Symptoms – Dyspnea, increased sputum production, cough, wheeze, marked gas trapping

1. GOLD 2018 Report
2. AAFP Management of COPD Exacerbations

MANAGEMENT

- ▶ 1st: Oxygenate & Ventilate to SPO₂ of 88-92%
 - ▶ Nasal Canula > Face mask > NIPPV > Invasive mechanical ventilation
- ▶ 2nd: Increase dosage of short-acting bronchodilators
 - ▶ Increase albuterol first, then +/- anti-cholinergics (ipratropium)
- ▶ 3rd: Add oral systemic corticosteroids (5-7 days)
 - ▶ Proven to increase FEV₁ and shorten hospital stay¹
- ▶ 4th: Consider antibiotics if concern for bacterial infxn (5-7 days)
 - ▶ Proven to reduce early relapse risk, treatment failure, hospital duration

ANTIBIOTIC TREATMENT ALGORITHM³



*If Mild Exacerbation then
no antibiotics are needed

REFERENCES

1. Global Initiative for Chronic Obstructive Lung Disease (GOLD) Pocket Guide to COPD Diagnosis, Management and Prevention, 2018 Report ([GOLD 2018 Pocket Guide Report](#))
2. AAFP Management of COPD Exacerbations (<https://www.aafp.org/afp/2010/0301/p607.htm>)
3. Siddiqi A, Sethi S, Optimizing Antibiotic Selection in Treating COPD Exacerbations, *International Journal of COPD* 3(1): 31-44: February 2008
(https://www.researchgate.net/publication/5362944_Optimizing_antibiotic_selection_in_treating_COPD_exacerbations)