COPD and Asthma Exacerbation Treatment
7/23/2017

Diagnosis is generally clinical in patient with **dyspnea, wheezing, and disease history**. Both involve **airway inflammation and spasm**.

Core treatments

1) **Duoneb** includes **Albuterol** (β agonist) and **Ipratropium** (anti-muscarinic) -> ↓ bronchospasm
2) **Systemic steroids** -> ↓ inflammation *PO prednisone or IV methylprednisone*

COPD Extras

3) **BiPAP** decreases work of breathing and can ↓ intubation and mortality rates
4) **Antibiotics** battle inflammation, infection often causes COPD exacerbations (azithromycin)

5 more treatments

5) **Magnesium sulfate** IV ↓ spasm in severe asthma exacerbation
6) **Ketamine** -> calm pt and reduce spasm
7) **Epinephrine IV** (systemic beta agonist)
8) **Heliox** -> decreased work of breathing
9) **Lastly: Intubation**, last resort because venting these patients is very hard

Quick facts

- BiPAP gives constant airway pressure PLUS some extra during inspiration
- Asthma doing well = resp alkalosis; **Asthma worn out = NORMAL CO2** (sign of decompensation)
- Ventilation concepts: **give pts a long time to exhale**
  - ↓ RR and tidal volume
  - ↑ Expiratory time and inspiratory flow