August 2012

Asthma and COPD

1. Q: What are the triggers of asthma?

A: 1. Exercise

1. Infection
2. Allergens: seasonal and pets
3. Irritants: pollution
4. Cold air
5. Medication
6. Emotional stress
7. Foods

2. Q: How often are asthma medications to be reviewed?

 A: Every 3 to 6 months.

1. Q: What is the cornerstone of asthma management?

A: Inhaled therapy that maximizes delivery of drugs to the respiratory tract and minimizes systemic side effects.

1. Q: What are the methods of delivering asthma medications?

A: 1. Metered dose inhalers (pMDI) with spacers

2. Dry powder inhalers (DPI)

3. Nebulized therapy

1. Q: Which delivery method is the most effective?

A: They are all equally effective.

1. Q: Name the two classes of asthma medications:

A: 1. Bronchodilators 2. Anti-inflammatory agents

1. Q: What are the classes of bronchodilator medications for asthma?

A: 1. Short Acting Inhaled Beta Agonists (SABA)

 2. Long-acting Inhaled Beta Agonists (LABA)

 3. Anticholinergic Agents

 4. Theophylline Products

1. Q: Name common SABA medications.

A: 1. Salbutamol 2. Terbutaline

1. Q: What are the SABA medications used to treat?

A: 1. Acute exacerbation 2. Prevent exercise induced asthma

1. Q: What is the dosing schedule for SABA?

A: PRN

1. Q: What is the use limit for SABA? Then do what?

A: If using a SABA > 4x Q Wk then add an anti-inflammatory medication.

1. Q: Name common LABA medications.

A: 1. Salmeterol 2. Formoterol

1. Q: What is the dosing schedule for LABA in the treatment of asthma?

A: Twice daily

1. Q: Which LABA has a rapid onset and may be used for rescue therapy?

A: Formoterol

1. Q: How are LABA medications to be dosed, alone or in combination?

A: LABA are to be used only when inhaled corticosteroids are already in use.

1. Q: Describe a major use of LABA medications.

A: Exercise induced bronchospasm.

1. Q: Name the Anticholinergic Agents used to treat asthma.

A: 1. Ipratropium 2. Tiotropium

1. Q: What are the uses of Ipratropium?

A: 1. As an alternative to Beta Agonists that cause tremor or tachycardia

 2. Longer acting broncho dilation than Beta Agonists

 3. Useful for beta-blocker induced bronchospasm

1. Q: How is Tiatropium used that is different from Ipratropium?

A: 1. QD admin rather than TID to QID

 2. Used as maintenance rather than acute care.

1. Q: Name the anti-inflammatory agents used to treat asthma.

A: 1. Inhaled corticosteroids 2. Systemic corticosteroids

3. Leukotriene Receptor Antagonists (LTRAs)

1. Q: Name the inhaled corticosteroid medications.

A: 1. Beclomethasone 2. Budesonide 3. Ciclesonide 4. Fluticasone

1. Q: What are two common inhaled corticosteroid and LABA medications?

A: 1. Salmeterol with Fluticasone 2. Budesonide with Formoterol

1. Q: What is the best dosing schedule for inhaled corticosteroid medications?

A: On a regular schedule at the lowest effective dose.

1. Q: What is the most common topical side effect of inhaled corticosteroid use?

A: Pharyngeal candidiasis.

1. Q: What can be done to reduce pharyngeal candidiasis?

A: Rinse mouth after dosing or use a spacer device.

1. Q: What are the asthma treatment uses of systemic corticosteroids?

A: 1. Asthma prevention 2. Acute asthma exacerbations

1. Q: What medications are in the class of Leukotriene Receptor Antagonists?

A: 1. Zafirlucast 2. Montelukast

1. Q: What is the initial drug strategy for COPD?

A: 1. SABA PRN 2. Supplement with long acting bronchodilators.

1. Q: What additional medications may be needed for COPD?

A: Maximum bronchodilation may require a combination of

LABA and anticholinergic medications

1. Q: What medications are used in acute exacerbations of COPD?

A: A combination of SABA and Ipratropium

1. Q: Theophylline may be used for extreme COPD, with what major cautions?

A: Drug interactions due to stopping smoking and clarithromycin use.

1. Q: What are the most common infectious agents in COPD exacerbations?

A: Viral

1. Q: What are the most common bacterial infectious agents causing acute

exacerbations in COPD? A: 1. Strep pneumonia 2. H.flu 3. Moraxella