OTC Cough and Cold Medications
Phillip J. Olsen, PharmD

Objectives
• Describe what should be considered when an OTC cough and cold medication is recommended
• List what OTC medication is used for a cough, runny nose, and nasal congestion
• Discuss counseling points for these medications including side effects, warnings, and precautions

Self Care
• Role of the technician
  – Discretion of the pharmacist
• Screening patient
  – What patients?
  – What conditions?
• Treatment, no treatment, or refer to physician
• If something is recommended
  – Give time frame to see physician if worsening or no improvement
Cough and Cold Medications

- Lots of products to choose from
  - Overwhelming unless we look at the ingredients
  - Only a handful of drugs in lots of different combinations
- Multi-symptom products
  - Convenient
  - May take ingredients they don’t need
- Marketing on product can cause patients to duplicate ingredients
- Cold is self-limiting and lasts 1 to 2 weeks
- Treatment is based on the specific symptoms of patient

Cough and Cold Medications

- Nondrug therapy
  - Hydration
  - Sleep
  - Humidifiers
  - Warm showers/baths
  - Vitamins/zinc
  - Saline nasal sprays
  - Neti pots

Cough and Cold Medications

- FDA consumer update Aug 2012
  - Keep pot clean by washing and air drying it after each use
  - Use sterile, distilled, or boiled then cooled water to do this
  - Don’t share pot with a family member or friend
  - Overuse may cause more sinus infections

Cough and Cold Medications

- Should not be used daily for a long period of time without being monitored by their physician
- Don’t use tap water
- Sterile or distilled water is recommended by the FDA
  - 2 people in 2011 developed a rare parasitic brain infection after using contaminated tap water in a sinus rinse product


Cough and Cold Medications

- Symptom: Cough
  - Dry or productive?
    - Dry = dextromethorphan
      - Cough suppressant
    - Productive = guaifenesin
      - Expectorant
  - What about giving both ingredients?

Cough and Cold Medications

- Jan 2007 FDA Public Health Advisory
  - Cough and cold medications not recommended for infants and children < 2 years
  - 3 infant deaths
  - 1519 children under 2 years treated in ER in 2004 to 2005
- What can be recommended for this age group?

Food and Drug Administration. (2011, February 23). Public Health Advisory: FDA Recommends that Over-the-Counter (OTC) Cough and Cold Medications not be used for Infants and Children under 2 Years of Age. Retrieved from http://www.fda.gov/drugs/drugsafety/postmarketdrugsafetyinforma...
Cough and Cold Medications

• DXM
  – AKA orange crush, triple c’s, red devils, skittles, and dex on the street
  – Analog of codeine
  – Overdose can cause breathing problems, convulsions, hallucinations, hyperthermia, and death
    • FDA has linked it to the death of several teenagers
    • Some products abused have acetaminophen and can lead to liver failure

Cough and Cold Medications

• Symptom: runny nose
  – Cold = virus
  – Allergies = histamine
  – 1st generation antihistamines
    • Diphenhydramine (Benadryl), chlorpheniramine (Chlortrimeton)
    • Drowsiness: often used for sleep
    • Taken multiple times a day
    • Anticholinergic: runny nose from cold AND allergies
      – Cough from post nasal drip

Cough and Cold Medications

• Anticholinergic side effects
  – Dry mouth
  – Dry eyes
  – Constipation
  – Urinary retention

• SLUD = salivation, lacrimation, urination, defecation

Ring Facts

<table>
<thead>
<tr>
<th>Active ingredient (in each tablet)</th>
<th>Package</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chlorpheniramine HCl 5 mg.</td>
<td>Chlorpheniramine</td>
</tr>
<tr>
<td>Diphenhydramine</td>
<td>Diphenhydramine</td>
</tr>
</tbody>
</table>

Note:†See Important Warnings below for the three or allergic respiratory symptoms.

- Runny nose
- Nasal congestion
- Itching of the nose or throat
- Drowsiness is taken three times a day due to the common cold

Anticholinergic medication

- Dry mouth
- Drowsiness

Diphenhydramine

- Professioanl product label:
Cough and Cold Medications

- Symptom: nasal congestion
  - Phenylephrine (Sudafed PE), pseudoephedrine (Sudafed)
    - Stimulants
    - In day time products
    - Combined with antihistamines to treat allergies
  - Nasal sprays: oxymetazoline (Afrin, Sinex) or phenylephrine (4-Way, Neo-Synephrine)
    - Max of 3 days

- 2nd generation antihistamines
  - Loratadine (Claritin, Alavert), cetirizine (Zyrtec), fexofenadine (Allegra)
  - Non-drowsy
  - Once a day
  - Prevents runny nose from allergies
    - Needs to be used daily during allergy season not as needed

Drug Facts

<table>
<thead>
<tr>
<th>Active Ingredient in each tablet</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Antihistamine</td>
</tr>
</tbody>
</table>

Uses
- Temporarily relieves these symptoms due to hay fever or other upper respiratory allergies
  - Itching of the nose or throat
  - Runny nose
  - Itching, sneezing

Warnings
- Do not use if you have ever had an allergic reaction to this product or any of its ingredients.

Directions
- Adults and children 6 years and older: Take 1 tablet daily, not more than 1 tablet in 24 hours
- Children under 6 years of age: Ask a doctor

Other Information
- Temporarily relieves symptoms associated with colds, hay fever, and other upper respiratory allergies.

Inactive Ingredients
- Carbomer, butylated hydroxyanisole, magnesium stearate

Questions or comments:
- 1-800-OIL-ITCH (1-800-645-4824) or www.calllitch.com

WEB: www.calllitch.com (for professional product label, Tramadol 40mg, 60mg, and 100mg)

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Take Home

• OTC cough and cold medications are commonly used
• Technicians can play an important role with patients needing a recommendation on OTC cough and cold medications
• There are several factors to consider when recommended an OTC medication
Questions

- What medication would be the most effective for a cough that happens at night from a post nasal drip?
  a. Loratadine
  b. Diphenhydramine
  c. Dextromethorphan
  d. Guaifenesin
  e. Menthol

Questions

- What medication should be avoided with someone who has uncontrolled blood pressure?
  a. Chlorpheniramine
  b. Cetirizine
  c. Phenylephrine
  d. Guaifenesin
  e. Doxylamine
Questions

- What prescription drug can cause a dry cough?
  a. Lisinopril
  b. Simvastatin
  c. Sumatriptan
  d. Tamsulosin
  e. Citalopram

Questions

- What medication can cause insomnia?
  a. Pseudoephedrine
  b. Guaifenesin
  c. Diphenhydramine
  d. a and b
  e. a and c

Questions

- Why is a nasal spray containing a decongestant only taken up to 3 days?
  a. Increase in blood pressure
  b. Excessive drowsiness
  c. Bloody nose
  d. Nausea
  e. Rebound congestion
**Questions**

- A patient buys a box of Sudafed and asks how long before he should see his physician with no improvement. An appropriate time would be?
  
  a. 3 days
  b. 2 days
  c. 6 days
  d. 7 days
  e. 10 days