Dangers of Over-the-Counter Medications

Most individuals assume that over-the-counter (OTC) medications are safe and free of serious side effects. When taken as directed, most over-the-counter medications are safe. However, this is not true for everyone, especially when combined with other over-the-counter drugs or prescription medications. Following is part two in the series covering over-the-counter medications and problems with their use.

Part II: Cold and cough preparations:

Decongestants:

Pseudoephedrine is a popular decongestant found in medications such as Sudafed®, Allegra D® and Zyrtec D®. Many products which list “D” in the name contain either pseudoephedrine or another decongestant called phenylephrine. The use of pseudoephedrine has come under scrutiny because large doses of it can be converted to produce methamphetamine. Today most states require pharmacies to put products containing pseudoephedrine behind the counter. They are only dispensed in a limited supply.

Pseudoephedrine has many side effects including:
- Dizziness
- Headache
- Nausea
- Restlessness and anxiety
- Rarely hallucinations
- Trouble sleeping
- Stomach upset
- Fast heart rate (palpitations)
- Increase in blood pressure (anyone being treated for high blood pressure should not use this medication)
- Increased risk for a stroke.

Phenylephrine is another decongestant that is most commonly used in place of pseudoephedrine in cold medications. It is generally less effective in controlling all of the symptoms of a cold. Problems associated with it include:
- Fast or irregular heart rates
- Excitability and restlessness
- Elevated blood pressure
- Increased seizure activity due to interactions with seizure medications

Cough preparations:

Dextromethorphan is another ingredient found in most cough and cold medications. This drug can be dangerous and even deadly if taken in large amounts. It also has addictive properties and is often abused.
When taken in large amounts, dextromethorphan can cause:

- Impaired judgment
- Feelings of elation or extreme happiness
- Loss of coordination or balance
- Dizziness
- Nausea and vomiting
- Hallucinations
- Seizures
- Depressed breathing
- Coma and death

**Antihistamines**

Most cold preparations contain an antihistamine. Antihistamines include: diphenhydramine (Benadryl®), chlorpheniramine (Chlor-Trimeton), brompheniramine (Dimetapp), and clemastine (Tavist). Besides causing drowsiness and a dry mouth when taken at recommended amounts, there are dangers associated with taking high doses. These include:

- Red, hot, dry skin due to loss of ability to sweat
- Elevated body temperature
- Blurred vision
- Difficulty urinating
- Anxiety, agitation, bizarre behavior
- Hallucinations, psychosis or paranoia
- Seizures
- Coma

For a runny nose caused by a cold, antihistamines are not recommended or helpful though they are often present in cold preparations. Antihistamines work by blocking the release of histamines (caused by allergies) but the symptoms of a cold are caused by a virus. Antihistamines block the flow of mucus from the nose but this is the same mucus that is ridding the body of the virus.

For more information regarding the treatment of the common cold, please refer to the Health Guidelines paper: “The Common Cold” (10/17/13).