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Health Notes by Evelyn Ames

Sniffles and Sneezes and Over-the-Counter Medications

Over-the-counter medications are drugs that are sold without prescription. These drugs affect function and are used to treat, alleviate, and/or prevent various health conditions. OTC labels are required by FDA to contain detailed information about usage and warnings of use. Each label must list the active ingredient and amount of each dosage, the uses (symptoms or diseases drug treats or prevents), warnings (e.g., when not to use, possible interactions/side effects, when to stop use, when to seek guidance from health provider), inactive ingredient (e.g., colors, flavors), purpose (drug action such as antihistamine), directions for using (e.g., how to take, how much and how often), and other information such as how to store properly. In addition, expiration date**,** lot or batch code**,** name and address of manufacturer, packer, or distributor, net quantity of contents**,** and what to do if an overdose occurs are required. Do note that these label requirements do not apply to dietary supplements, as these are regulated as food products and are not required to be proven safe or effective, only to be manufactured in a safe and clean environment.

There are many products advertised and available to treat or prevent sniffles and sneezes. The question to ask is this: are the sniffles and sneezes due to cold viruses or are they due to allergies? The following information compares two major categories, antihistamines and nasal decongestants, that are individually or in combination on the market.

ANTIHISTAMINES:

- Basic purpose of antihistamines is to counteract the effect of histamine which is released during an antigen-antibody reaction. Their action is restricted to the pharmacological antagonism of the released histamine. When the body is exposed to an allergen, histamine is released. This release of histamine causes cells to swell (edema) and leak fluid, causing itching, sneezing, runny nose and watery eyes.
- Basic uses for which they are used include allergic reactions, sleep inducement, motion sickness, sinus congestion, and skin eruptions due to allergy.
- Basic side effects of antihistamines: drowsiness/sedation (highest frequency), thickening of mucus, dryness (of mouth, nose, and throat), insomnia, blurred vision, fatigue, tinnitus, and irritability. Less common side effects involve the digestive tract (nausea, constipation or diarrhea, loss of appetite). Other side effects include urinary frequency, headache, tightness in chest, and hypotension (low blood pressure).
- Names of common first generation OTC antihistamines: Brompheniramine (Dimatene), Dimenhydrinate (Dramamine), Chlorpheniramine (Aller-Clor, Chlor-Trimeton), Clemastine (Tavist-1), Diphenhydramine (Benadryl 25, Benylin Cough, Nytol, Sominex), and Doxylamine succinate (Vicks Nyquil and does cause more drowsiness than chlorpheniramine).
- First generation drugs can affect the inner ear and affect part of the brain (hypothalamus) that controls nausea and vomiting. This is why some are taken to prevent motion sickness.
- Names of second generation OTC antihistamines include Loratadine (e.g., Alavert and Claritin) and Cetirizine (Zyrtec). These newer antihistamines cause less drowsiness.
- ***High-risk groups****:* people with glaucoma, liver disease, enlarged prostate, breathing problems (e.g., asthma or emphysema), thyroid disease, high blood pressure, and those who have difficulty urinating need to be cautious about using first generation antihistamines.
- ***Medication interactions:*** antihistamines increase sedative effect if taken with alcohol, narcotics, sleeping medications, muscle relaxants, or anti-anxiety drugs (e.g., tranquilizers); can cause dry mouth if taken with drugs taken for stomach cramps (anticholinergics).

NASAL DECONGESTANTS

- Basic purpose of nasal decongestants is to counteract bodily symptoms caused by cold viruses.

- Basic use for which they are used is for a stuffy nose due to a cold, hay fever, and/or allergies. They are also used as appetite suppressants. They are stimulant-type drugs.
- Basic action is to constrict blood vessels in nasal passages, thereby shrinking the swollen tissue and opening nasal passages with result of freer breathing, better drainage, and reduced stuffiness.
- Topical sprays and drops act fast (within 5 minutes)**:** they should not be used more than 3 days in a row. If used too frequently, a rebound effect occurs. This means the condition, a stuffy nose, becomes the result of overuse of a topical nasal decongestant. In other words, overuse causes the condition for which the drug was originally taken to relieve. Names of commonly advertised topicals: oxymetazoline (Afrin 12-hour, Dristin 12-hour, Duration 12-hour), Phenylephrine (Neo-Synephrine, Vicks Sinex, Alconefrin). Afrin is usually used every 10 to 12 hours as needed, but not more often than twice in a 24-hour period.
- Oxymetazoline may cause side effects such as burning, stinging, increased nasal discharge, dryness inside the nose, sneezing, nervousness, nausea, dizziness, headache, difficulty falling asleep or staying asleep. If one experiences a fast heartbeat, call your physician immediately.
- Oral decongestants act more slowly (from 30 to 60 minutes). Basic side effects include insomnia, nervousness, and restlessness.

- Pseudoephedrine or phenylephrine may be the only active ingredient in a product or may be combined with other drugs (e.g., antihistamine, analgesic, cough suppressant, and/or hallucinogen such as belladonna alkaloids). Check nonprescription cough and cold product labels carefully before using two or more products at the same time. These products may contain the same active ingredient(s) and taking them together could cause an overdose.
- ***High risk groups***: people with diabetes, heart disease, high blood pressure or overactive thyroid.
- Shot gun approaches for cold remedies usually contain 2-3 basic drugs: antihistamine, nasal decongestant, and an analgesic (pain reliever). A cough suppressant, dextromethorphan, is often included. **Best advice if using an OTC product: decide if you have a cold or if you are experiencing an allergic reaction? Then ask yourself what is/are your symptom(s) and read the label to find the active ingredient that targets the symptom(s)! Generally the shot gun approach is less effective than a single ingredient product.**
- **Internet Resources:**
  www.nlm.nih.gov/medlineplus/druginfo/meds/a606008.html
  www.nlm.nih.gov/medlineplus/druginfo/meds/a608026.html
  www.nlm.nih.gov/medlineplus/druginfo/meds/a606008.html
  familydoctor.org/online/famdocen/home/otc-center/otc-medicines/859.printerview.html
  vsearch.nlm.nih.gov/vivisimo/cgi-bin/query-meta?v%3Aproject=medlineplus&query=antihistamines
  www.fda.gov/Drugs/ResourcesForYou/Consumers/BuyingUsingMedicineSafely/UnderstandingOver-the-CounterMedicines/ucm093514.htm

Home Remedy recommended by primary care doctors: prepare a salt water solution (use warm water) and sniff/snort the fluid into your nasal passages to relieve congestion.