Clinicians advised to take individualized approach to treating acute cough

In an update to the 2006 guidelines, a review published last November in *Chest* presented few advances in the treatment of acute cough associated with the common cold (CACC).1,2 Study authors found no evidence to support or refute the use of OTC zinc lozenges, antitussives, expectorants, mucolytics, antihistamines, or combination products.

Mark A. Malesker, PharmD, and colleagues analyzed six systematic reviews and four randomization, controlled trials, reporting data on 6,496 participants with CACC who received one or more interventions. The studies used an assortment of methods and assessments to identify CACC. The authors reported that evidence supporting management of CACC was of low quality overall.

However, “these guidelines represent statements based on a lack of medical evidence, because the studies have not largely been performed in rigid fashion that allows for a meta-analysis,” said Marc H. Scheetz, PharmD, MSc, BCPS AQ-ID, associate professor of pharmacy practice at Midwestern University Chicago College of Pharmacy and infectious diseases pharmacist at Northwestern Memorial Hospital in Chicago. “Despite a lack in literature, it is important to treat patients’ symptoms when the potential benefits outweigh risks,” he said. “Pharmacists and other providers should employ clinical knowledge in this regard, remembering to treat patients with an individualized approach.”

Reviewing the recommendations
According to the guideline, cough and cold medicines should not be used in adults or pediatric patients unless they have been shown to make cough less severe or resolve sooner. Based solely on a primary outcome measure for reducing the duration or severity of CACC, a number of treatments deemed potentially nonefficacious may still have places in therapy.

As Scheetz noted, “In their recommendation against the use of nonsteroidal anti-inflammatory agents until they have been shown to make cough less severe or resolve sooner, other outcomes, such as amelioration of pain associated with cough, were not considered. Thus, pharmacists and other health care practitioners should help individual patients navigate the treatment of their personal symptoms.”

Infants younger than 1 year should not be administered honey, and children younger than 2 years should not be given dextromethorphan for cough symptoms.3 For pediatric patients aged 1 year to 18 years with CACC, honey may offer more relief than no treatment, diphenhydramine, or placebo but was not found to be better than dextromethorphan.

In pediatric patients younger than 18 years, the recommendation to avoid codeine-containing products coincides with FDA warnings of the risk for potential overdose and development of life-threatening breathing problems.3,4

Focusing on the patient
Although no significant advancement in treatment of CACC has taken place since the 2006 update,7 dozens of pharmacologic and nonpharmacologic treatment options are currently available, including combination therapies. Patients rely on pharmacists for assistance with appropriate individualized medication selection and use.

“Even though FDA has classified OTC medications as generally safe and appropriate for use without the direct supervision of a health care professional,” said Scheetz, “many cough and cold medications have drug and disease interactions. Pharmacists are highly knowledgeable in the arena and can help patients avoid drug misadventures.” In August 2016, for instance, FDA issued a news release warning clinicians to avoid combining opioids and opioids found in cough medicines, benzodiazepines, or other central nervous system depressants.5

Both prescription and OTC products contain active ingredients with potential for abuse. As the last stop before medication dispensing, pharmacists must help prevent serious complications and harm. High doses of dextromethorphan can cause euphoria and dissociative effects. Promethazine with codeine syrup is combined with soda, fruit candy, or even alcohol to produce a sensation of relaxation, euphoria, and intoxication.

Judging the severity and duration of cough in different patients, Scheetz explained, “is difficult for any single practitioner to assess in a systematic and quantitative fashion. It is important to consider the symptoms and disease state of the patient and select therapies directed at safe amelioration.”

Cough guidelines:

**How to protect yourself**
- Viruses that cause colds can spread from infected people to others through the air and close personal contact. This can happen when you shake hands with someone who has a cold or touch a doorknob that has viruses on it, then touch your eyes, mouth, or nose.
- Help reduce your risk of getting a cold by: washing your hands often with soap and water.
- Practice good cough and sneeze etiquette: cough and sneeze into a tissue or your upper shirt sleeve, completely covering your nose and mouth.
- Reduce your chances of getting a cold by: washing your hands; avoiding touching your nose, mouth, and eyes with unwashed hands; and avoiding people who are sick.

References
1. Chest 2006;129:72S–74S
   ucm318472.htm

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