IOM Urges Hepatitis Screening, Prevention

BY KERRI WACHTER

The Institute of Medicine is calling for increased awareness of hepatitis B and C among health care providers, social service providers, and at-risk communities as well as better surveillance and more stringent vaccination requirements nationwide in its newly released report on hepatitis and liver cancer.

"The committee believes that these recommendations will prevent further infections, improve the lives and health of infected individuals, and reduce the long-term burden of liver disease and liver cancer," Dr. R. Palmer Beasley said during a teleconference sponsored by the National Academies of Science. Dr. Beasley chaired the IOM committee that wrote the report "Hepatitis and Liver Cancer: A National Strategy for Prevention and Control of Hepatitis B and C" (available at www.iom.edu/viralhepatitis).

"Although hepatitis B and C are preventable, the rates of infection have not declined over the past several years, underscoring the conclusion that we have allowed gaps in screening, prevention, and treatment to go unchecked," Dr. Beasley said in a statement.

"This report outlines the additional resources and actions needed to reduce the unacceptably high burden of liver disease and cancer associated with these viruses," said Dr. Beasley, who is a professor of epidemiology and disease control at the University of Texas in Houston.

It's estimated that 800,000 to 1.4 million Americans have chronic hepatitis B, and between 2.7 million and 3.9 million have chronic hepatitis C. Most are unaware that they are infected until they develop symptoms of liver cancer or liver disease.

The committee identified three major factors that impede current efforts to prevent and control hepatitis B and C:

► Lack of knowledge and awareness about chronic viral hepatitis on the part of health care and social service providers.

► Inadequate knowledge and awareness about chronic viral hepatitis among at-risk populations, members of the public, and policy makers.

► Insufficient understanding about the extent and seriousness of this public health problem that has led to the inadequate allocation of resources for prevention, control, and surveillance programs.

Perhaps the greatest difficulty in diagnosing and treating patients with hepatitis B and C is that these diseases are often asymptomatic.

In addition, minority groups—Asians, Pacific Islanders, and blacks—are at greatest risk. Those most at risk for hepatitis B include people born in East and Southeast Asia or sub-Saharan Africa, infants born to women infected with the disease, and people who have sexual contact or share injection-drug equipment with an infected person. Those at greatest risk for hepatitis C include people who received a blood transfusion before 1992 (before implementation of blood screening for hepatitis C) and past or current injection drug users.

The committee noted that health care and social service providers generally have limited knowledge about the two conditions. Many of these providers fail to follow guidelines for screening patients and providing prevention, treatment, and follow-up services.

The committee made recommendations for improving surveillance, knowledge and awareness, immunization, and services for viral hepatitis. Highlights of these recommendations include:

► A complete evaluation by the Centers for Disease Control and Prevention of the national hepatitis B and C public health surveillance system.

► Coordination between CDC and key stakeholders to develop hepatitis B and C education programs for health care and social service personnel.

► Coordination between CDC and key stakeholders to develop innovative and effective programs to target at-risk populations and to increase awareness of hepatitis B and C among the general public.

► Vaccination of all neonates weighing at least 2,000 g and born to hepatitis B–positive women.

► Mandatory vaccination for hepatitis B as a requirement for school attendance.

► Studies to develop a vaccine for hepatitis C.

► Resources for the expansion of community-based programs that provide hepatitis B screening, testing, and vaccination services that target at-risk populations.

► A public awareness initiative, similar to the successful effort to increase recognition, prevention, and treatment of HIV/AIDS.

The report was developed in partnership with the Centers for Disease Control and Prevention Foundation, the Office of Minority Health, the Department of Veterans Affairs, and the National Viral Hepatitis Roundtable. ■

MINDFUL PRACTICE

NSAIDs and Symptoms of the Common Cold

BY JON O. EBBERT, M.D., AND ERIC G. TANGALOS, M.D.

The Problem

A 62-year-old man with a history of diet-controlled type 2 diabetes mellitus, aortic stenosis, obstructive sleep apnea, and benign prostatic hypertrophy presents with a 1-week history of cough, sinus congestion headache, and ear pain. Cough is productive of yellowish to greenish phlegm. He denies shortness of breath, fever, chills, night sweats, sinus pain, sore throat, arthralgias, or myalgias. On exam, he is afebrile, and his ear, nose, and throat and heart/lung exams are normal. You counsel him on the appropriate use of antibiotics (which this is not) and discuss symptomatic measures with him. You recall your own recent respiratory tract infection and how ibuprofen helped you get through the day. Because the patient has no history of GI bleeding, renal disease, or hypertension, you discuss the potential benefit of NSAIDs. You think that an NSAID would likely help with aches (which he doesn't have) but are unsure if use will improve his sinus congestion and cough.

The Question

In patients with a "cold," do NSAIDs improve cough, compared with placebo?

The Search

You open PubMed (www.pubmed.gov), enter "cough" and "NSAIDs" and limit the search to meta-analysis. You find a relevant study. (See box.)

Our Critique

This comprehensive meta-analysis was well conducted but may be limited by the diversity of inclusion criteria, type and dose of NSAIDs, and duration of therapy among the trials. As the authors note, evidence exists suggesting that cold symptoms might be related to inflammatory mediators such as prostaglandins and kinins, which are blocked by NSAIDs, rather than to direct viral cytopathic effects. The most apparent effect of NSAID therapy relates to the known analgesic effects, which likely account for an observed beneficial effect on headache, ear pain, and joint and muscle aches. We were surprised that NSAIDs had no effect on throat irritation or pain given their analgesic properties. NSAIDs should be used sparingly to avoid fluid retention.

Clinical Decision

You tell your patient that an NSAID may help his ear pain and headache but will not be helpful for his cough. You refer to a previous column (Mindful Practice, "Persistent Cough: Do the Usual Remedies Work?" April 15, 2002, p. 14) and note that codeine, antihistamines, and decongestants may not work for his cough either. You tell the patient to rest and drink plenty of fluids. You also tell him that you will get back to him after you find and review the meta-analysis on chicken soup for colds with cough.

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Non-steroidal anti-inflammatory drugs for the common cold. Cochrane Database Syst. Rev. 2009 July 8;(3):CD006362. Review. PubMed PMID: 19588387.

► **Criteria for study inclusion:** Randomized, controlled clinical trials in adults or children studying the treatment of the common cold with NSAIDs. The case definition of the "common cold" was recent onset of symptoms of runny and/or stuffy nose and sneezing, with or without headache and cough. Studies enrolling subjects who did not meet this case definition were excluded.

► **Study identification:** Authors searched the Cochrane Central Register of Controlled Trials (CENTRAL), EMBASE (January 1980 to March 2009), CINAHL (January 1982 to March 2009), ProQuest Digital Dissertations, KoreaMed (January 1958 to March 2009), and KMbase (January 1949 to March 2009).

► **Study selection/data abstraction:** Three authors independently screened titles and abstracts retrieved by the search strategy. Discrepancies in article selection were resolved by consensus. Four authors abstracted the data.

► **Outcomes:** The primary outcomes were global evaluation of efficacy in the treatment of common cold symptoms, and decrease in the amount or duration of individual common cold symptoms.

► **Results:** A total of 55 papers were identified but only 9 were included in the final analyses. Articles were excluded for lack of randomization or unclear subject allocation, inclusion of febrile patients, or inclusion of subjects with diagnoses other than colds. Nine randomized, controlled trials were identified that included a total of 1,064 patients with the common cold. Included studies evaluated both community-infected and experimentally infected cold patients. Five studies used ibuprofen, two used aspirin, and two used loxoprofen (not available in the United States). Duration of therapy varied from a single dose to twice-daily doses for 7 days. Notably, NSAIDs did not reduce the total cold symptom score, duration of colds, chills, sore throat, cough, rhinorrhea, nasal obstruction, or eye itching. However, NSAIDs significantly reduced headache scores (standard mean difference [SMD] –0.65, 95% CI –0.97 to –0.32), muscle and joint pain (SMD –0.40, 95% CI –0.77 to –0.03), and ear pain (SMD –0.59, 95% CI –1.04 to –0.14). NSAIDs also reduced sneezing (SMD –0.44, 95% CI –0.75 to –0.12). A trend toward a reduction in malaise was observed (SMD –0.29, 95% CI –0.6 to 0.03). Only the loxoprofen study showed evidence of increasing frequency of adverse events.