Medical News

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Changing Patterns of Infection

Since the advent of antibiotic therapy, efficacy, safety, and tolerance have been central issues when selecting the most appropriate agent against an infectious disease. For this reason, physicians prefer antibiotics with broad spectrums of activity that can be administered in small doses with few resulting side effects.

Over the same period, however, physicians have seen significant changes in the patterns of infection. While *Streptococcus pneumoniae* and *Haemophilus influenzae* remain the most common bacteria responsible for lower respiratory tract infections, recent studies have shown that atypical pathogens—intracellular bacteria once thought to be nonpathogenie-such as *Mycoplasma pneumoniae* and *Legionella pneumophila* also cause community-acquired pneumonia. According to recent reports, *M pneumoniae* alone may account for up to 33% of community-acquired pneumonia cases in the general population and up to 50% in closed populations such as college dormitories and military barracks.

Adding to the scope of this problem is the fact that *H influenzae* and *Moraxella catarrhalis* are becoming increasingly resistant to routinely administered antibiotics, such as penicillins and cephalosporins. Twenty-five percent to *30%* of *Haemophilus* strains, for example, are resistant to amoxicillin and cephalothin. *M catarrhalis* has been reported to have 80% to 90% resistance to penicillins.

In recent years, researchers have been developing advanced macrolides with improved activity against a broader spectrum of pathogens including common traditional *(e.g., S pneumoniae, H influenzae, M catarrhalis,* and *Streptococcus* pyogenes) and atypical strains *(e.g., M pneumoniae).* Other attributes of these advanced macrolides are enhanced tissue and serum concentration and improved tolerance. Biaxin (Abbot Laboratories, Chicago, Illinois) is indicated for the treatment of upper and lower respiratory tract infection and skin structure infections, and has been shown to be active against a broad range of common and atypical pathogens.

Several Federal Agencies Take Action Against Medical Disinfecting Agents

The Food and Drug Administration (FDA), the Environmental Protection Agency (EPA), the Federal Trade Commission (FTC), and two United States Attorney's offices have taken action to remove from the market disinfecting agents manufactured by Sporicidin International (Rockville, Maryland) used to sterilize medical instruments. The agencies said the agents may pose a risk to public health.

On December 13, 1991, the FDA filed court actions to seize Sporicidin Cold Sterilizing Solution, Sporicidin-HD, Sporicidin Brand Disinfectant Solution, Sporicidin Brand Disinfectant Spray, and Sporicidin Disinfectant Tbwelettes.

The FDA also began a mandatory recall of Sporicidin Cold Sterilizing Solution and Sporicidin-HD, maintaining that the sterilizing solution does not work. The FTC filed a district court complaint for a preliminary injunction to prohibit false and misleading advertisement of the cold sterilizing solution.

The Centers for Disease Control is not aware of the occurrence or transmission of disease associated with the use of these products. However, use of an ineffective sterilant/disinfectant could be associated with an increased risk for disease transmission, specif-

ically as a result of the use of medical instruments that may retain patient material even after vigorous cleaning.

The FDA is asking doctors, dentists, and hospitals to stop using the products immediately and switch to alternatives. Institutions needing more information on alternatives can call the EPA's National Pesticide Telecommunications hotline at (800) 858-7378.

From the Centers for Disease Control

ASEPTIC MENINGITIS-NEW YORK STATE AND THE UNITED STATES, WEEKS i-36,1991

During April-October 1991, several state health departments noted increased reports of aseptic meningitis (The Centers for Disease Control [CDC] case definition for aseptic meningitis is a syndrome characterized by acute onset of meningeal symptoms, fever, and cerebrospinal fluid pleocytosis, with bacteriologically sterile cultures[1]). This report summarizes finding from epidemiologic investigation of and surveillance efforts for aseptic meningitis in New York state and elsewhere in the United States.

New York

In New York, information on cases is collected by local health units and forwarded to the New York State Department of Health (NYSDOH), using the Council of State and Territorial Epidemiologists' (CSTE) case definition for surveillance.[1] From January through August 1991, 636 cases of aseptic meningitis were reported to the NYSDOH (excluding New York City), a 153% increase over the average number of cases reported during the same eight-month period for 1987-1990.

From January through August 1991, the statewide incidence rate was 8.9 cases per 100,000 population, compared with 3.9 cases per 100,000 for the same period in 1990. The increase in reporting occurred statewide.

Preliminary data from 11 state laboratories that perform viral isolation showed increased isolations of coxsackieviruses, echovirus 30, and enteroviruses not yet typed. During June-July 1991, the Nassau County Medical Center detected echovirus 30 in 12 (67%) of 18 patient specimens from which nonpolio enteroviruses were isolated; during 1990, echovirus 30 was isolated from one (2%) of 57 patient specimens.

United States

From the reporting period ending August 24, 1991, through the period ending October 12, 1991, reports of aseptic meningitis nationally have exceeded historical limits for each four-week reporting period. Cases of aseptic meningitis are not reportable in five states (Connecticut, Idaho, New Jersey, Oregon, and Washington); however, among states with reporting requirements, 8,415 cases were reported during the first 36 weeks of 1991, compared with an average of 2,992 cases reported during weeks 1-36 of 1986-1990. The highest rates were reported from Vermont and Rhode Island (34.3 and 29.1 cases per 100,000 persons, respectively). In Vermont, reported cases increased ten-fold over baseline from April through July. States reporting elevated rates of aseptic meningitis were concentrated in the eastern United States, particularly in New England and among the mid-Atlantic states.

Outbreaks were reported in Massachusetts, Ohio, and other states. For example, in Massachusetts, echovirus 30 was isolated from specimens from seven patients involved in a community-wide outbreak. In Ohio, a middle school football coach, a student manager, and three members of the team developed aseptic meningitis during an eight-day period in September; in this outbreak, an enterovirus (not yet identified) was isolated from two patients. The local health department initiated an education campaign that promoted handwashing and discouraged the shared use of drinking vessels and open ice buckets.

REFERENCE

1. Centers for Disease Control. Case definitions for public health surveillance. MMWR. 1990;39:6.

From the *MMWR*. 1991;40:773-775.

SCREENING FOR HEPATITIS B VIRUS INFECTION AMONG REFUGEES ARRIVING IN THE UNITED STATES, 1979-1991

Because hepatitis B virus (HBV) infection is highly endemic in several areas of the world, both the prevalence of and risk for HBV infection are substantially greater among persons emigrating from these areas to the United States than for the overall US population. In 1985, federal funds were made available to supplement ongoing state and local health department refugee-screening programs and to promote serologic screening for HBV infection in pregnant Indochinese women and household contacts of these female HBV carriers among persons identified by the Department of State as refugees entering the United States. This report summarizes data collected during 1979-1991 by selected screening programs that implements universal hepatitis B (HB) screening at different times.