

Hemorrhagic Conjunctivitis — Continued

coastal populations in humid areas are at higher risk. Good hand-washing practices have prevented spread among medical personnel and should also be encouraged among contacts of patients with AHC. Because the duration of illness is usually less than 1 week, and no long-term ophthalmologic sequelae have been reported, the best treatment is supportive. Physicians are encouraged to report outbreaks of conjunctivitis consistent with AHC to their local and state health departments.

References

1. CDC. Acute hemorrhagic conjunctivitis — Latin America. MMWR 1981;30:450-1.
2. CDC. Acute hemorrhagic conjunctivitis — Key West, Florida. MMWR 1981;30:463-4.

Dermatitis of the Scalp Associated with the Installation of Ceramic Wool Fiber (Kao-wool) Insulation in a Nuclear Power Station — Ohio

In September 1980, the National Institute for Occupational Safety and Health (NIOSH) conducted a clinical and environmental evaluation involving 24 guards and 28 other workers at a nuclear power station, because of a history of dermatitis of the scalp within the preceding 2 years. Disease typically started at the point where the occipital scalp had contact with the plastic inner liner of a hard hat. One case had progressed to folliculitis that necessitated treatment with topical and systemic antibiotics and steroids. No significant differences were found between patients and nonpatients with respect to age, sex, race, history of allergy, shampoo use, length of employment, glove use, frequency of positive scalp cultures, or use of a hard hat.

Cases of scalp dermatitis had occurred in 2 waves—5 in the summer of 1978, and 27 in the spring and summer of 1980; 4 other cases were reported sporadically. Cases occurred with nearly uniform frequency among all occupational groups surveyed except clerical workers and power plant operators. Further questioning indicated that both peaks in cases had coincided with periods of installation of Kao-wool, a ceramic wool fiber (and asbestos substitute) used as insulation in the power station. Except for clerks and power plant operators, who spent most of their time in enclosed control rooms, all workers interviewed reported contact with Kao-wool. Dermatitis was confirmed for 24 of the workers by physical examination.

Gravimetric analysis of personal breathing-zone air samples taken 10 days after the latest phase of Kao-wool installation was completed revealed no detectable airborne exposures. Additionally, inspection of ledges, rafters, and other relatively inaccessible areas revealed no visible accumulation of fibers.

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Editorial Note: Synthetic mineral fibers may be made from glass, slag, or kaolin by stream-jet fiberization to produce a fiber that may vary from $< 1 \mu$ to $> 20 \mu$ in diameter and may be as long as 10 cm (1). These fibers, unlike asbestos, break only transversely; thus they maintain their original diameter when cut or manipulated. Most investigations of synthetic mineral fibers have focused on possible respiratory or carcinogenic effects. Results of epidemiologic investigations to date have shown only upper respiratory

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irritation without significant lung involvement, while animal studies have demonstrated tumor production when fibers were injected directly into the pleura and peritoneum of rats (2). In addition, glass fibers with diameters of 0.5 μ have been shown to produce mesothelioma in laboratory animals (3). Dermatologic effects of exposure to synthetic fibers have also been well described previously, including reports of itching erythema in areas of skin exposed to fibers in the 5- to 20- μ range (4). Secondary infection or folliculitis is a rare complication of fibrous glass dermatitis (5). Persistent, irritant dermatitis such as that reported here has not been described previously, nor has scalp dermatitis been associated previously with Kao-wool. Possible explanations for this outbreak include the installation of Kao-wool blankets without impermeable covering, mandatory use of hard hats in areas of high temperature (which led to profuse sweating), and electrostatic attraction of airborne fibers such as Kao-wool to plastic hard hats and hard-hat liners.

References

1. Pundsack F. Fibrous glass—manufacture, use, and physical properties. In: Occupational exposure to fibrous glass: a symposium. Rockville, Md: National Institute for Occupational Safety and Health, 1976:11-8. (DHEW publication no. [NIOSH] 76-151).
2. Hill JW. Man-made mineral fibers. J Soc Occup Med 1978;28:134-41.
3. Wagner JC, Berry G, Skidmore JW. Studies of the carcinogenic effects of fiberglass of different diameters following intrapleural inoculation in experimental animals. In: Occupational exposure to fibrous glass: a symposium. Rockville, Md: National Institute for Occupational Safety and Health, 1976:193-7. (DHEW publication no. [NIOSH] 76-151).
4. Possick PA, Gellin GA, Key MM. Fibrous glass dermatitis. Am Ind Hyg Assoc J 1970;31:12-5.
5. Lucas J. The cutaneous and ocular effects resulting from worker exposure to fibrous glass. In: Occupational exposure to fibrous glass: a symposium. Rockville, Md: National Institute for Occupational Safety and Health, 1976:211-9. (DHEW publication no. [NIOSH] 76-151).

Salmonellosis from Homemade Ice Cream — Georgia

On May 28, 1981, homemade ice cream was served with cake to 25 children ages 4-6 years at a school party in Lamar County, Georgia. Over the next 4 days, 20 (80%) of the children and 2 of 4 adults at the party became ill with fever and diarrhea. All had temperatures ranging from 102 F to 106 F (38.9 C-41.1 C); other symptoms reported were abdominal cramps (91%), nausea (68%), vomiting (68%), headache (64%), muscle aches (41%), sore throat (27%), bloody stools (18%), and cough (18%). The illness began a median of 29 hours (range 18-94) after the party. Seventeen persons were seen by physicians, and 3 were hospitalized. *Salmonella typhimurium* was isolated from stool specimens obtained from 4 patients.

No food was left over for culture; however, ice cream custard was considered the vehicle of transmission since it was prepared from uncooked ingredients, and baked food items have rarely been associated with salmonellosis. The ice cream was made from vanilla, sugar, pasteurized milk and cream, and raw eggs. Some of the eggs had been obtained directly from local farms.

A follow-up investigation in 19 households of the children who had been ill showed that, in the month after the party, 3 (5%) of 61 other household members had an illness characterized by fever and diarrhea; *S. typhimurium* was isolated from 1 individual. This

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Epidemiologic Notes and Reports

Acute Hemorrhagic Conjunctivitis — Florida

Additional cases of acute hemorrhagic conjunctivitis (AHC) have recently been reported from 2 areas in Florida.

In the period September 4-September 21, 1981, the Monroe County Health Department received reports that 362 cases of illness compatible with AHC had occurred in the municipality of Key West, Florida. An initial survey of 78 families reporting to the health department for treatment revealed a total of 129 cases. Ninety-eight (76%) of the patients were black, 25 (19%) were white, and 6 (5%) were Hispanic. Seventy-five patients (58%) were female, and 54 (42%) were male. Patients ranged in age from 9 months to 75 years. The geographic distribution of the 78 families surveyed was confined to 2 of 40 census tracts, and most cases occurred in 2 neighboring housing projects. Cases continue to occur at the same rate.

Beginning on September 8, cases of AHC were reported from Dade County, Florida. The Department of Ophthalmology, University of Miami, continues to report 15-65 cases per day. A total of 259 cases were seen between September 15 and September 21. A review of 57 patients selected at random revealed that 93% had bilateral conjunctival injection and irritation, 91% had subconjunctival hemorrhage, 96% had excessive tearing, 77% had preauricular lymphadenopathy, and 66% had lid edema; none of the patients had fever or symptoms of upper respiratory infection. These 57 patients ranged in age from 9 weeks to 81 years; 92.6% were black and 5.4% were white; female:male ratio was 1.7:1. The incubation period is estimated to be less than 24 hours in most cases, and the secondary attack rate for affected families is high.

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Editorial Note: Extensive outbreaks of AHC have been reported this year from India and Latin America (1). At this time, health officials from only Miami and Key West, Florida, have reported significant outbreaks in the United States (2). Factors influencing spread in the United States are, as yet, unknown; however, it is believed that high-density