Surgeon 1

Three of 328 patients who were tested were positive for HIV antibody. Preliminary information suggests that risk factors are likely for all three persons; investigations are in progress.

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OUTBREAK OF PHARXNGOCONJUNCTIVAL FEVER AT A SUMMER CAMP—NORTH CAROLINA, 1991

On July 19, 1991, the Communicable Disease Section of the North Carolina Department of Environment, Health, and Natural Resources (DEHNR) was notified that an outbreak of acute upper respiratory illness had occurred in campers and counselors at a four-week summer camp. Manifestations of the illness included pharyngitis, cough, fever to 104" (40°C), headache, myalgia, malaise, and conjunctivitis. On August 2, the DEHNR was notified of a similar outbreak during a second four-week session at the camp. The epidemiologic investigation, initiated by the DEHNR on August 7, identified the cause as pharyngoconjunctival fever (PCF) associated with infection with adenovirus type 3. This report summarizes findings from the investigation.

The first camp session (June 16-July 12) was attended by 768 boys aged 7-16 years and 300 counselors aged 17-22 years. On July 12, first-session campers returned home, but counselors remained at the camp for the second session (July 14-August 9), which 800 boys attended, Approximately 700 persons swam each day in a one-acre, human-made pond that had a maximum depth of ten feet. Well water was continuously pumped into the pond at multiple sites through pipes located one foot below the surface of the water; the water overflowed, through a spillway, into an adjacent river. An automatic chlorination system treated the water before it entered the pond. The pond water was turbid, and plants grew in the bottom of the pond.

During the first session, 226 persons (175 campers and 51 staff members [i.e., counselors, administrative staff, and infirmary personnel]) visited the camp infirmary because of onset of symptoms of upper respiratory illness. During the second session, 369 campers and 86 staff members visited the infirmary with the same upper respiratory manifestations noted during the first session.

A convenience sample of 181 campers from the second session and 40 staff members at the camp was interviewed. A case of PCF was defined as two of four symptoms-sore throat, fever, cough, and red eyes—lasting more than one day. The attack rate for those surveyed was 112 (52%) (88 campers and 24 staff members) of 216; duration of illness was unknown for five individuals.

Every camper swam at least once during the four weeks; 158 (90%) of 175 swam one or more times per day. The attack rate for campers who swam daily (74 [48%] of 153) did not differ significantly from that for campers who swam less than once per week (11 [65%] of 17 [relative risk (RR) = 0.8; 95% confidence interval (CI_{95}) = 0.5-1.3]). The attack rate for staff who swam was higher than that for staff who did not swim (10 [77%] of 13 versus 13 [54%] of 24 [RR= 1.4; CI,, = 0.9-2.31) and increased with increased frequency of swimming. The attack rate for nonswimmers was 54% (13 of 24); for infrequent swimmers (i.e., those who swam once per week or less) was 75% (six of eight); and for frequent swimmers (i.e., those who swam three or more times per week) was 80% (four of five). Of the 221 campers and staff members interviewed, 75 (41 campers and 34 staff members) reported whether they had shared a towel with another person. Towel sharing increased the risk for illness (11 of 12 who shared versus 31 of 63 who did not [RR = 1.9; CI, = 1.4-2.51).

Of viral cultures (nasopharyngeal and throat swabs obtained from 25 ill persons), 19 grew adenovirus serotype 3. Convalescent geometric mean titres

(GMT) to adenovirus for persons with cases during sessions one and two (GMT 14 and GMT 28, respectively) were each significantly higher ($p<.01$) than the GMT of persons not meeting the case definition (GMT 6). Bacterial analysis of grab samples of water obtained from the pond yielded 80 colonies per 100 cc of fecal coliiorms, 200 colonies per 100 cc of *Enterococcus*, and 9,000 colonies per 100 *cc* of *Staphylococcus*. A concentrated sample of pond water drawn approximately six feet below the surface yielded adenovirus serotype 3. Residual chlorine was not detectable.

One week after the end of the second session the pond was drained, and most counselors left. No further outbreaks were reported following the second session; however, all subsequent sessions during the summer and fall were of maximum one-week duration.

AVAILABILITY OF VARICELLA VACCINE FOR CHILDREN WITH ACUTE LYMPHOCYTIC LEUKEMIA

An investigational, live, attenuated varicella vaccine is available free through Merck Research Laboratories to any physician requesting it for certain pediatric patients (aged 12 months to 17 years) with acute lymphocytic leukemia (ALL). Patients must meet specified criteria, including no clinical history of varicella and continuous remission for at least 12 months.

Varicella vaccine is being provided to this group of patients for use through a study protocol to monitor and evaluate safety. An investigational new drug application for the vaccine has been filed with the Food and Drug Administration.

Previous experience with this vaccine has shown it to be immunogenic in children with ALL.[1] The most common reaction to the vaccine is mild (fewer than 100 lesions) varicelli-form rash, occurring in approximately 40% of vaccinees.[2]

The physician must provide information outlined in the protocol, and the protocol and consent form for the study must be approved by the institutions Investigation Review Board. Additional information about eligibility criteria and vaccine administration is available from Dr. Jo White, Merck Research Laboratories, telephone (215) 834-2554.

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