Laboratory and Epidemiology Communications

Salmonella Serovar Montevideo Involved in a Food Poisoning Outbreak at a Club for Elderly Persons in April 2002 in Hyogo Prefecture

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Communicated by Takashi Kawamura

(Accepted November 14, 2002)

In comparison with those caused by Salmonella serovar Enteritidis, food poisonings caused by S. serovar Montevideo have been rare in Japan (1). In April 2002, we experienced an outbreak of food poisoning in a club for elderly people on Awaji island in Hyogo Prefecture. Among 38 persons who ingested the suspected lunch prepared by a caterer, 23 persons of 59-79 years of age developed symptoms such as diarrhea and fever. S. Montevideo strains were isolated from stool specimens of 12 severe symptomatic and four asymptomatic patients (strain Nos. 1-16). As references, we used three S. Montevideo strains isolated in unrelated cases, one isolated from a sporadic case of a resident in the same island in the same month (strain No. 17) and two from contaminated eggs in 1993 and 1994 (strain Nos. 18 and 19, respectively).

Fig. 1. PFGE patterns of XbaI- and BlnI-digests of chromosomal DNA of Salmonella Montevideo isolates. (A), XbaI-digests; and (B), BlnI-digests. Strains No. 1-16 are isolates from the outbreak in April 2002, No. 17 is an isolate from sporadic infection in April 2002, and Nos. 18 and 19 are isolates from eggs in 1993 and 1994.


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The 19 strains were tested for sensitivities to ampicillin, cefotaxime, kanamycin, gentamicin, streptomycin, tetracycline, trimethoprim, ciprofloxacin, fosfomycin, chloramphenicol, sulphamethoxazole-trimethoprim, and nalidixic acid by using antibiotic disks (Becton Dickinson Microbiology Systems, Cockeysville, Md., USA) (2). All were sensitive to the tested antibiotics. We examined the pulsed-field gel electrophoresis (PFGE) patterns of chromosomal DNAs digested with \textit{XbaI} (Takara Shuzo Co., Ltd., Kyoto) (Fig. 1A) or \textit{BlnI} (Takara Shuzo) (Fig. 1B), employing a Gene Path Typing System (Program No. 5; Bio-Rad Laboratories, Hercules, Calif., USA). All the isolates from the food poisoning were identical with one another and with one from a sporadic infection, but largely different from the egg isolates. The present food poisoning and the sporadic case were probably caused by the same strain.

The past two decades experienced an increasing incidence of various kinds of \textit{Salmonella} (1), such as \textit{S. Oranienburg} and \textit{S. Chester} (3), \textit{S. Braenderup} (4), \textit{S. Brandenburg} and \textit{S. Corvallis} (5), and the present \textit{S. Montevideo}. The incidence rates of these infections will continue to increase due to reasons that include the increase in international travel and trade, and changes in the food production system and dietary habits (6).

REFERENCES


