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A Fatal Food Intoxication Case due to *Salmonella* Haifa

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We report the case of a 78-year-old male who died of food intoxication in Nagasaki in October of 2004. He had diarrhea around 7 p.m. on September 29. On the next morning he developed fever of 38.7°C with a chill, and his family called a doctor. At midnight on October 1 his condition suddenly deteriorated and he was sent to a hospital in Nagasaki. His condition further deteriorated to a critical level with symptoms of septic shock. He died of renal failure on October 2. At 9 p.m. on September 30, his 1-year-old grandchild, who had been living in the same house, developed a fever of 38.8°C, and around 6 p.m. the following evening the child had watery diarrhea. He was treated in a clinic and recovered after treatment.

A commercial laboratory isolated bacteria belonging to genus *Salmonella* from the fecal specimens of the patient and his grandchild, and sent them to our laboratory. It was confirmed that the isolates belonged to *Salmonella enterica* subsp. *enterica* by biochemical tests, including an assay of

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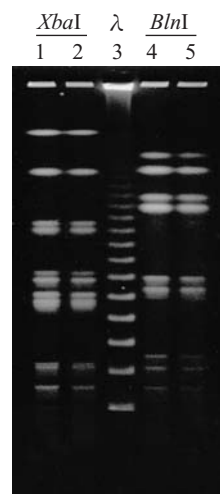


Fig. 1. PFGE pattern of *Salmonella* Haifa isolates. Chromosomal DNA of the isolates was digested with *Xba*I (Lanes 1-2) or with *Bln*I (Lanes 4-5) restriction enzymes, and electrophoresed for 19 h under 200 V at an electrophoretic speed with an initial switch time of 2.2 sec and final switch time of 63.8 sec. Lanes 1 and 4: isolate from the grandchild. Lanes 2 and 5: isolate from the fatal case (grandfather). Lane 3: DNA size marker (λ DNA ladder).

H₂S production. The isolates were further serotyped as *Salmonella* Haifa. Both isolates showed identical antibiotic sensitivities, i.e., they were both sensitive to ampicillin, piperacillin, cefazolin, cefotaxime, cefoperazone, aztreonam, imipenem, gentamicin, minocycline, sulfamethoxazole/trimethoprim, ofloxacin, chloramphenicol, and fosfomycin, and both showed identical PFGE patterns of *Xba*I- or *Bln*I-digested chromosomal DNAs (Fig. 1). The results suggested that these two family members had developed food intoxication by ingestion of the same food(s). However, we were un-

able to identify the responsible food(s). There have been few reported cases of ingestion of *S.* Haifa-contaminated food, and fewer still in which such ingestion was fatal.

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