

Correspondence

Severe Hepatitis E Virus Infection after Ingestion of Uncooked Liver from a Wild Boar

To the Editor—As was reported in the *Journal*, by Takahashi et al. [1] as well as by the authors of a letter to the editor about Takahashi et al.'s article [2], hepatitis E virus (HEV) infection caused by genotypes III and IV seems to be cryptically endemic in Japan, with the transmission mode yet to be resolved. Zoonotic risks have been suggested for sporadic HEV infections, particularly in industrialized countries [3]. We hereby report our recent experience in Japan, which may support the zoonosis hypothesis.

A 53-year-old man (patient A) was admitted to one of our hospitals for acute hepatitis on 12 March 2003. His hepatitis was a severe type, as indicated by the levels of total bilirubin (10.2 mg/dL) and prothrombin (only 17%). Despite the initial severity of the disease, he showed a rapid recovery, without developing fulminant hepatic failure. Convalescence serum obtained on 15 April was positive for both IgM and IgG classes of anti-HEV but was negative for HEV RNA. Acute-phase serum from this patient was not available.

Later, to our surprise, it was revealed that, on the same day that patient A had been admitted, one of his friends (a 70-year-old man; patient B) had been admitted to another hospital, for similarly severe hepatitis (total bilirubin, 17.1 mg/dL; prothrombin, 40%). Patient B developed hepatic coma and died of fulminant hepatic failure on 13 April. Acute-phase serum obtained on 13 March was found, retrospectively, to be positive for HEV RNA. Determination of a 326-nt partial open-reading frame-1 sequence of his HEV RNA (accession no. AB114178) in-

dicated that this isolate segregates to genotype IV.

During the 3 months preceding the onset of disease, neither patient A nor patient B had traveled to areas where HEV is endemic, but patient A mentioned that he and patient B had enjoyed eating uncooked boar liver together a total of 5 times from late January to early February. Among the patients' family members and friends, no one had eaten the boar liver and no one had contracted hepatitis. Chandler et al. [4] reported serological evidence suggesting boars and pigs as candidate animal reservoirs for HEV. Although we could not prove that the uncooked boar liver was the source of the HEV infection (since it all had been eaten), it appears likely that this was the case.

We Japanese are notorious for the peculiarity of our eating habits: we like to eat uncooked fish (sashimi or sushi) and, less frequently, raw meat (including liver from mammals). These eating habits may, at least partially, explain the cryptic endemicity of HEV infection in Japan.

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References

1. Takahashi K, Kang JH, Ohnishi S, Hino K, Mishiro S. Genetic heterogeneity of hepatitis E virus recovered from Japanese patients with acute sporadic hepatitis. *J Infect Dis* **2002**; 185: 1342–5.
2. Aikawa T, Kojima M, Takahashi M, Nishizawa T, Okamoto H. Identification of indigenous hepatitis E virus from a Japanese patient who contracted sporadic acute hepatitis in 1982. *J Infect Dis* **2002**; 186:1535–6.
3. Meng XJ. Novel strains of hepatitis E virus identified from humans and other animal species: is hepatitis E a zoonosis? *J Hepatol* **2000**; 33: 842–5.
4. Chandler JD, Riddell MA, Li F, Love RJ, Anderson DA. Serological evidence for swine hepatitis E virus infection in Australian pig herds. *Vet Microbiol* **1999**; 68:95–105.

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