for echinococcosis. Confirmed cases of infection in dogs further showed the potential threat of domestic dogs transmitting *E. multilocularis* to humans in this region, as well as the potential for dispersal to other islands of Japan if proper preventive measures are not implemented.

A previous report of necropsy examinations of 9,849 dogs from 1966 to 1999 showed a prevalence of 1.0% (*10*). Although necropsy is considered the most reliable method to diagnose *E. multilocularis* in definitive hosts, it is not applicable for live animals such as domestic dogs and cats. Fecal egg examination is generally used; however, infection is difficult to confirm because the morphology of taeniid eggs is indistinguishable from those of *E. multilocularis*, and eggs are excreted intermittently even after the worms mature. Coproantigen detection had proven useful for primary screening and was documented to have 94.9% sensitivity and 100% specificity for echinococcosis in wild red foxes in Hokkaido (*1*). The combined egg examination, ELISA, and PCR methods we used showed an accurate and rapid diagnosis in domestic dogs, which is important for immediate reporting, treatment, and action to safeguard dog owners.

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Maculopathy and Dengue

To the Editors: We thank Su and Chee (*1*) for their interest in our article, "Retinal Hemorrhages in 4 Patients with Dengue Fever" (*2*). We reported the findings of this small case series to highlight the presence of retinal hemorrhage as a manifestation of ophthalmic complication in patients with dengue fever. We wanted to describe characteristic clinical features (such as association of onset of visual symptoms with resolution of fever and nadir of thrombocytopenia) and propose epidemiologic explanations for the sudden rise in the incidence of observed ocular complications of dengue fever in our population. Our article did not attempt to conclude that the retinal hemorrhages were responsible for the patients' visual symptoms, as suggested by Su et al. In fact, we stated that in all 4 patients "fundoscopic examination showed macular hemorrhages and exudative maculopathy."

The range of dengue-related ophthalmic complication is still being investigated, and we agree with Su and Chee that other ophthalmic manifestations may occur in patients with dengue fever. In a retrospective observational case series involving 22 eyes of 13 patients with visual impairment from dengue infection, carried out in our hospital, Chan et al. (*3*) found evidence of retinal hemorrhage, macular edema, cotton wool spots, retinal vasculitis, exudative retinal detachment, and anterior uveitis. Therefore, physicians and ophthalmologists should be aware of the possibilities of ophthalmic complications in the management of patients with dengue fever.

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Enterohemorrhagic *Escherichia coli* Excretion by Child and Her Cat

To the Editor: Enterohemorrhagic *Escherichia coli* (EHEC) can cause severe hemorrhagic colitis characterized by gastrointestinal symptoms and bloody diarrhea as well as hemolytic uremic syndrome (*1*). Cattle and small ruminants are the major natural reservoir of these foodborne pathogens (*1*,*2*). Human infections may also develop after direct contact with cows, goats, sheep, and deer (*1*). Although domestic dogs and cats are known as rare EHEC carriers (*3*,*4*), no human EHEC infections associated with pet contact have been reported. Here we report the first case of an EHEC strain infecting both a child and her domestic cat.

A 2-year-old girl with bloody diarrhea and vomiting subsequently tested positive for EHEC serotype O145:H–. The isolated strain harbored the pathogenicity-associated genes *stx1*, *stx2*, *eae*, and *hly*, as tested by PCR. An enterohemolytic phenotype was also present. After notification of the local health authority, a rigorous search for the possible source of the girl's infection was started. When asked for instances of animal contact, her parents mentioned the family cat, which the girl often handled. The cat is restricted to the house, has no contact with other animals, and is fed only canned catfood. The animal strictly uses a litter box, which is cleaned regularly by the parents. No gastrointestinal symptoms in the cat were recorded. Repeated stool samples from the cat grew a strain of EHEC O145:H– that showed the identical pathogenicity gene pattern as the girl's isolate. Moreover, a restriction fragment length polymorphism analysis proved the clonal identity of both strains. Because both the girl and the cat continuously excreted the EHEC strain, the cat was assumed to be a possible source of the girl's infection or reinfection. The cat's infection was treated with probiotics, but the child's EHEC positivity did not change. After 3 months, the girl spontaneously stopped excreting EHEC, while the cat's stool samples remained EHEC positive. The cat was then treated by peroral autovaccination with the heat-inactivated EHEC strain for 10 consecutive days and subsequently stopped shedding EHEC. In the Table, the clinical course and laboratory findings of both girl and cat are summarized.

To our knowledge, this case is the first documented of an EHEC strain's affecting both a human and a domestic cat. Both excreted EHEC for ≈3 months. Although the girl had vomiting and diarrhea, the cat was asymptomatic. Several possibilities regarding the infectious process can be noted. First, the girl might have contracted the disease from her asymptomatic pet. Although in a study on *eae*-positive *E. coli* strains, ≈6% of the investigated 62 cats tested positive, none of these cats was infected with EHEC serotype O145:H– (*3*); this finding indicates that in our case the cat might not have been the direct source for the girl's infection. Moreover, foodborne transmission to the cat seems unlikely because it was exclusively fed with canned food that was heated during preparation. Second, the cat might have been infected by the girl. Although the prevalence of EHEC serotype O145:H– is relatively low, it ranks among the 6 most often isolated non–O157 EHEC strains in human infections, accounting for 5%–7% of all non–O157 EHEC strains in prevalence studies in Finland (*5*), Germany (*6*), and the United States (*2*,*7*). A similar epidemiologic pattern for EHEC serotype O145:H– is seen in

Table. Clinical picture and isolation of EHEC serotype O145:H– from stool samples of child and her cat*

Date	Girl	Cat
Dec 1, 2004	Vomiting and diarrhea	
Dec 9	Tested positive	ND
Dec 22	Tested positive	Tested positive
Dec 28	Tested positive	ND
Jan 10, 2005	Tested positive	ND
Jan 17	Tested positive	ND
Jan 21	Tested negative	ND
Jan 24	Tested positive	Tested positive, treated with probiotics
Feb 1	Tested positive	ND
Mar 4	Tested negative	ND
Mar 12	Tested negative	ND
Apr 25	ND	Tested positive
Jun 25–Jul 4	ND	Autovaccination
Jul 29	ND	Tested negative
Aug 11	ND	Tested negative

*EHEC, enterohemorrhagic *Escherichia coli*; positive and negative refer to the isolation of EHEC serotype O145:H– ; ND, no testing was done.