## First Isolation of Rickettsia slovaca from a Patient, France

To the Editor: Rickettsia slovaca is a bacterium that infects Dermacentor marginatus ticks in central and western Europe. First detected in ticks, the bacterium was subsequently identified with genomic amplification by using polymerase chain reaction (PCR) followed by sequencing in a skin biopsy from a French patient (1). We describe the first isolation of the organism from a patient.

A 79-year-old woman from St. Etienne, France, found a tick on the parietal area of her scalp 6 days after she returned from a trip to rural southern Burgundy. The tick was removed and subsequently identified as an adult female D. marginatus tick. The patient saw a physician 1 day later for lowgrade fever (38°C) and myalgia. She was given amoxicillin (3 g once a day), but the fever worsened. She was examined at University Hospital on September 24, 2001, 4 days later. At that time, the patient had a fever; the site of the tick bite showed a necrotic black lesion surrounded by an erythematous halo 4 cm in diameter. Right cervical lymphadenopathy and a papular rash consisting of 10 pink spots on the thorax and arms were observed. Routine blood tests were within normal ranges but asparate aminotransferase (53 IU; normal <45), creatine phosphokinases (140, normal <120), and lactate dehydrogenases (890, normal <620) were elevated. A skin biopsy from the patient's scalp, serum, and the tick were sent to Marseille to test for possible rickettsial infection. The patient was treated with doxycycline (200 mg once a day, 15 d), and her condition improved. At a check-up 1 month later, she complained of fatigue and insomnia; 2 months later, she had recovered completely, although alopecia appeared at the site of the tick bite.

R. slovaca was demonstrated in the tick and the biopsy by using PCR with primers derived from the citrate synthase and the rOmpA genes as previously reported (2). R. slovaca was found in human embryonic lung cells (2), 3 days after the cells were injected with the skin-biopsied material. Sero-conversion, determined by indirect immunofluorescence, occurred with titers to both R. slovaca and R. conorii of <1/8 and 1/128 in acute- and convalescent-phase sera (sampled 2 months later), respectively.

R. slovaca, first identified in dermacentor ticks from Slovakia, has subsequently been found in both D. marginatus and D. reticulatus in France, Switzerland, Portugal, Spain, Armenia, and Germany (3). Since the first human infections with R. slovaca were reported, patients with similar clinical signs have been observed in France and Hungary (4). Some of these cases have been confirmed by PCR and others by serology (3), although serologic titers are frequently low and show cross-reactions with other Rickettsiae. We have described the isolation of R. slovaca from a patient, which provides the first definitive evidence that R. slovaca is a human pathogen. Clinical signs of infection consist of a skin lesion at the site of a tick bite on the scalp (often a dermacentor tick) and regional lymphadenopathy that may be painful. Fever and rash develop subsequently, and the acute disease can be followed by fatigue and residual alopecia at the bite site. The disease may be prevalent within the distribution range of D. marginatus and D. reticulatis in southern, western, and central Europe. This new spotted rickettsiosis should be added to the list of recognized rickettsial diseases, mainly those caused by R. africae (5), R. felis (6) and R. mongolotimonae (7,8).

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## References

- Raoult D, Berbis P, Roux V, Xu W, Maurin M. A new tick-transmitted disease due to *Rickettsia slovaca*. Lancet 1997;350:112–3.
- La Scola B, Raoult D. Laboratory diagnosis of rickettsioses: current approaches to the diagnosis of old and new rickettsial diseases. J Clin Microbiol 1997;35:2715–27.
- Raoult D, Lakos A, Fenollar F, Beytout J, Brouqui P, Fournier PE. A spotless rickettsiosis caused by *Rickettsia slovaca* and associated with Dermacentor ticks. Clin Infect Dis 2002;34:1331–6.
- Lakos A. Tick-borne lymphadenopathy—a new rickettsial disease? Lancet 1997:350:1006.
- Raoult D, Fournier PE, Fenollar F, Jensenius M, Prioe T, de Pina JJ, et al. *Rickettsia africae*, a tick-borne pathogen in travelers to sub-Saharan Africa. N Engl J Med 2001;344:1504–10.
- Zavala-Velasquez JE, Sosa-Ruiz JA, Zavala-Castro J, Jimenez-Delgadillo B, Vado-Solis IE, Sanchez-Elias RA, et al. *Rickett-sia felis*—the etiologic agent of three cases of rickettsiosis in Yucatan. Lancet 2000:356:1079–80.
- 7. Raoult D, Brouqui P, Roux V. A new spotted-fever-group rickettsiosis. Lancet 1996:348:412
- 8. Raoult D, La Scola B, Enea M, Fournier PE, Roux V, Fenollar F, et al. A flea-associated *Rickettsia* pathogenic for humans. Emerg Infect Dis 2001;7:73–81.

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## Enteropathogenic Klebsiella pneumoniae HIV-Infected Adults, Africa

To the Editor: Although *Klebsiella pneumoniae* lives as a commensal in the intestine, this bacterium can occasionally cause diarrhea in HIV-negative persons (1–4). Some of these diarrheagenic strains encode thermostable or thermolabile toxins (2). One group of researchers showed that a