Six major clinical forms of tularemia have been described: ulceroglandular, glandular, oculoglandular, pharyngeal, typhoidal and pneumatic. Tularemia is a challenging diagnosis because of its varied presentation; however, it is considerably more difficult to identify when it presents in an unusual way.

Case
A 43-year-old male sought medical care on June 9. He had a constellation of symptoms including fever, vomiting, cough and severe diarrhea. On the day of admission, he had begun to suffer from orthostasis. The patient was a member of a family that had been involved in a community clean-up on May 29. Several had presented with similar symptoms. The family members had been exposed to urine and animal feces during the clean-up; others involved had not been exposed.

The patient’s physical exam findings included decreased air flow in the lungs bilaterally, diffuse abdominal pain with no hepatomegaly and an enlarged lymph node on the side of his neck. Laboratory data showed elevated WBCs and liver enzymes, hyponatremia and hypokalemia. Chest X-ray revealed patchy opacities bilaterally, right perihilar infiltrates and blunting of the right costophrenic angle. Empiric therapy with doxycycline, metronidazole, piperacillin/tazobactam and amphotericin was started to treat what were likely bacterial organisms.

The patient was tested for C. difficile, Legionella, Giardia, Cryptosporidium, Salmonella, Shigella, Campylobacter, E. coli, Aeromonas, Norovirus and Yersinia. A hepatitis panel and HIV antigen test also were done because the patient had a past history of drug use. All tests came back negative.

During this time, empiric treatment was switched to vancomycin, ciprofloxacin and piperacillin/tazobactam following a recommendation by infectious disease. Further laboratory testing was done for tularemia, Q fever, leptospira, rotavirus and adenovirus. All tests came back negative, except for tularemia, which had a titer of 1:40. Additional testing was done a month later and the titer was 1:2560, which was considered diagnostic for tularemia.

The patient spent a total of 10 days in the hospital. His nausea, fever and diarrhea slowly improved, and he was discharged after these symptoms resolved.

One month after admission, he continues to have headaches and he remains 30 pounds below his pre-sickness weight because of the severe diarrhea and appetite loss caused by tularemia.

Conclusion
This case illustrates the severity and variability of symptoms that can be present in a patient with tularemia. Not only did this patient have an unusual presentation with primarily gastrointestinal symptoms, but he also was outside the typical geographic areas where tularemia is found. This case demonstrates the importance of maintaining a broad differential in order to diagnose a disease that is presenting in an uncharacteristic pattern and geographic region. MM