A 15-year-old Hispanic boy with refractory T-cell acute lymphoid leukemia was hospitalized because of fever and pain and swelling of the right knee of 3 days' duration. The patient was taking nelarabine for a recurrence of his leukemia, which was diagnosed a year earlier. He appeared nontoxic. His temperature was 39.2°C (102.6°F). Other vital signs were within normal limits. The right knee was warm and tender, with mild restriction of movement.

The white blood cell count was 9100/µL, with an absolute neutrophil count of 5733/µL, hemoglobin level of 9.2 g/dL, and platelet count of 36,000/µL. A radiograph and ultrasonogram of the right knee revealed moderate joint effusion. Intravenous cefepime and vancomycin were started pending the results of blood and urine cultures.

Arthrotomy with debridement of the right knee was performed; 150 mL of cloudy straw-colored fluid was removed. Fluid analysis revealed 7000 nucleated cells/mL, with 92% neutrophils. Gram stain showed no organisms. Synovial fluid and blood cultures grew Salmonella arizonae. After sensitivity testing, vancomycin was discontinued and cefepime was replaced with ceftriaxone.

MRI of the right knee showed an area of enhancement in the anterior distal femoral metaphysis that represented early focal osteomyelitis (Figures 1, 2, 3, and 4). The patient underwent a second arthrotomy with irrigation and debridement of the right knee. Culture of the drained fluid again grew S arizonae, which was sensitive to ceftriaxone, ciprofloxacin, and cefepime. The swelling and pain of the right knee decreased after 10 days. Subsequent blood culture results were negative.

On further questioning, it was learned that the patient had been eating fresh rattlesnake meat (that was seasoned and grilled) for a month after the diagnosis of leukemia. The boy's family believed that the snake meat would cleanse his blood. Consumption of rattlesnake meat is associated with S arizonae infection, which is a cause of osteomyelitis. Rattlesnake meat "CURE"—A CAUSE OF SALMONELLOSIS

Serious infection with S arizonae is rare. However, it has occurred in many Hispanic persons who consumed rattlesnake meat, capsules, or powders as a form of alternative medicinal therapy. These preparations are widely believed to be beneficial for many illnesses, including arthritis, cancer, and HIV infection. A survey of the literature shows that many cases of S arizonae infection involved infants and children. Most adults with S arizonae infection had an underlying disease, such as AIDS, systemic lupus erythematosus, cancer, or leukemia.

S arizonae is a facultative anaerobic Gram-negative bacillus of the family Enterobacteriaceae. It is found in many animals, including reptiles, fowl, ducks, rats, dogs, and cats. Reptiles, particularly snakes, are the natural reservoir of S arizonae. They are asymptomatic carriers of this pathogen and are probably infected through contaminated water, food, or soil. The bacteria usually exist as commensal flora in the animal gut. They are thought to enter the human host through the GI tract after consumption of contaminated food products.

CLINICAL PRESENTATION

Gastroenteritis is the most common clinical presentation of S arizonae infection; gastroenteritis associated with S arizonae is similar to that of salmonellosis. The incubation period is usually 2 to 48 hours and is characterized by fever, abdominal pain, vomiting, and diarrhea. The risk of dehydration is substantial because of the severity of diarrheal illness. In addition to gastroenteritis, bacteremia, sepsis, meningitis, osteomyelitis (as in this case), pneumonia, otitis media, peritonitis, and wound infection have been reported. A carrier state is not uncommon and recurrence of S arizonae
sepsis in an immunocompromised patient after 1 year has been reported.\textsuperscript{10} 
\textit{S. arizonae} has been isolated from blood, urine, stool, pleural fluid, and lymph nodes. The infection can be confirmed with culture of the affected area, serological testing, or polymerase chain reaction assay. **\textbf{TREATMENT}**

\textit{S. arizonae} appears to be susceptible to commonly prescribed antibiotics (\textbf{Table}).\textsuperscript{12} Drugs for salmonellosis include ampicillin, trimethoprim/ sulfamethoxazole, and chloramphenicol, although fluoroquinolones, aminoglycosides, and vancomycin also have been used in various combinations with apparent effectiveness.\textsuperscript{15} Immunocompromised patients require prolonged therapy.\textsuperscript{15} Infection has recurred after apparent clearance of the organism demonstrated by negative cultures.\textsuperscript{2,3,16,17} **\textbf{KEY POINTS FOR YOUR PRACTICE}**

It is essential to ask all patients whether they use alternative medicinal therapy--especially those in whom conventional medical treatment fails. Advise those who do about the potentially harmful outcomes associated with such therapies and with certain folk remedies. *

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