

## Images in Clinical Tropical Medicine

### A 60-Year-Old Man from the Highlands of Peru with Fever and Hemolysis

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A 60-year-old male presented with a 2-week history of fever, jaundice, and altered mental status. Three months ago, he spent 30 days in the Peruvian Andes and reported insect bites. The physical examination revealed a severely ill patient

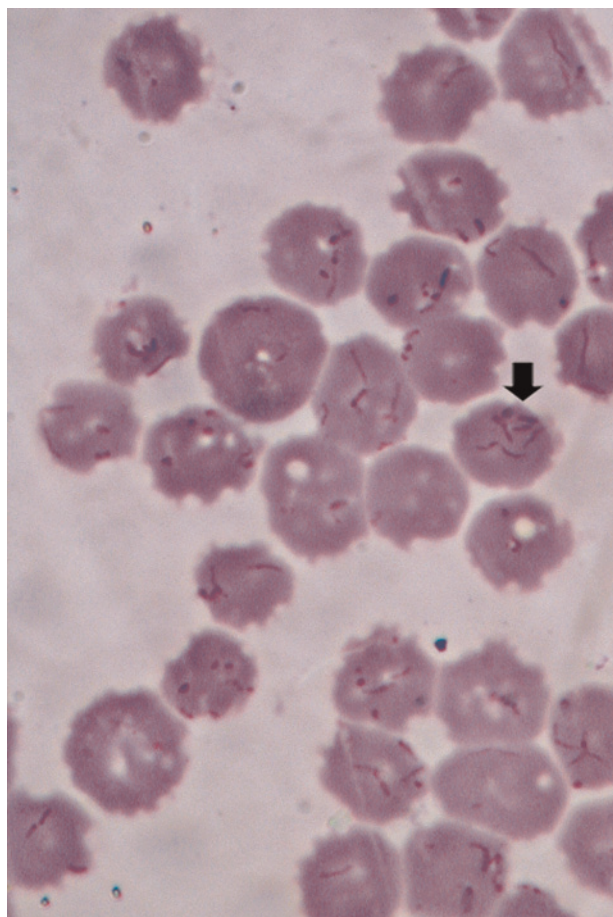


FIGURE 1. Wright's stain of a peripheral blood smear showing massive infection of red blood cells with coco-bacillary structures compatible with *Bartonella bacilliformis* (arrow).

with marked pallor on the skin and mucous membranes, jaundice, fever, and hypotension. The liver was felt 4 cm below the right costal margin; the patient was somnolent and disoriented but no focal or meningeal signs were found. The hemoglobin was 5.8 g/dL; total bilirubin was 13.9 mg/dL with conjugated bilirubin of 8.2 mg/dL, and the reticulocyte count was 8%. Blood films were negative for malaria, but more than 95% of them contained small pleomorphic coccobacillus (Figure 1). A 10-day course of ciprofloxacin and ceftriaxone was given with full recovery.

Acute bartonellosis caused by *Bartonella bacilliformis*<sup>1</sup> or *Bartonella rochalimae*,<sup>2</sup> also called Carrion's disease, named after the Peruvian medical hero Daniel Carrion, is endemic in certain areas of the Andes regions of Peru, Ecuador, and Colombia. The disease is transmitted by sandflies of the genus *Lutzomyia*. Severe anemia resulting from hemolysis is the hallmark of the acute phase. Prompt initiation of antibiotic treatment reduces the high mortality rate associated with this disease.

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## REFERENCES

1. Maguina C, Garcia PJ, Gotuzzo E, Cordero L, Spach DH, 2001. Bartonellosis (Carrion's disease) in the modern era. *Clin Infect Dis* 33: 772–779.
2. Eremeeva ME, Gerns HL, Lydy SL, Goo JS, Ryan ET, Mathew SS, Ferraro MJ, Holden JM, Nicholson WL, Dasch GA, Koehler JE, 2007. Bacteremia, fever, and splenomegaly caused by a newly recognized *Bartonella* species. *N Engl J Med* 356: 2381–2387.

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